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ART. I.—*Observations on the Botany of Illinois, more especially in reference to the Autumnal Flora of the Prairies.* In a letter to Daniel Drake, M.D., &c.

MY DEAR SIR:

The interest which you have long taken in every thing relating to the Natural History of the Western States, and the desire which you have so frequently expressed to connect the study of Botany with the pursuit of medicine, will, I trust, be a sufficient apology for my addressing these observations to you. Having, moreover, very recently yourself traveled over a part of the country to which they refer, you will be the better enabled to judge of their correctness.

In a tour which I took through the State of Illinois, a few years previous to your own, I had the pleasure of being ac-

companied by my brother, and one or two other individuals, who took a considerable interest in the objects which mainly prompted my journey; and traveling in a light covered wagon, well prepared for making extensive collections, and vigilantly on the look-out for every object of interest, I may safely say that few such escaped our observation. Our visit to this interesting region was made in the latter part of summer, and extended so late into the fall, that severe frosts had put an end to vegetation before our return; so that my remarks must be considered as referring to the *autumnal Flora* of the Prairies, and may not be applicable to that of the spring, or early summer. We entered the State of Illinois from Terre Haute on the Wabash river, near the line dividing that State from Indiana; thence we traveled in nearly a north-western direction to Peoria, on the Illinois river; through Paris, Urbanna, Bloomington, and Mackinaw: and returning we took a more southern route through Tremont, Springfield, Hillsborough, Maysville, and Lawrenceville to Vincennes; where we recrossed the Wabash, which here forms the boundary between the States of Indiana and Illinois. This trace extending over a distance of nearly 400 miles, led us through the central portion of the State in two different lines, at a considerable distance apart, and gave us an opportunity of seeing and examining the face of the country and its productions under a great variety of aspects.

In a Geographical point of view, the surface of Illinois may be very appropriately, as it is naturally, divided into three districts. First—The heavily timbered tracts which for the most part occupy the southern portion of the State, bordering on the Ohio river, and which, extending into the middle and northern portions, are found in detached bodies surrounded by prairies, and in these situations are called 'Groves.' These groves are, for the most part, contiguous to, and often bounded by water-courses, which have preserved them from the action of fire. Secondly—The open prairies, of from one to twenty miles in diameter, entirely destitute of

trees, and indeed of all other woodly plants, except along the margin of water courses which occasionally pervade them. Thirdly—'The Barrens,' or tracts somewhat intermediate between the two former, being sparsely covered with oak trees of several different kinds, and of considerable size, with a dense undergrowth of various shrubs and annual plants. This third region bears a close relationship, both in appearance and productions, to those districts in Kentucky, which are called 'Barrens'—tracts of country which seem to be in a state of transition from more open prairies to densely timbered forests.

The vegetation of these three districts is, of course, essentially different; but apart from the presence or absence of trees, which constitute the grand feature of distinction, the annual and suffruticose plants are widely different, and indeed in many respects entirely dissimilar. It is, however, to the productions of the open prairies that I shall chiefly confine myself in this communication: and even they vary greatly as the surface of the prairie may be high, rolling, rich and dry, or low, wet and clayey.

The first sight of a prairie with which we were greeted was in the neighborhood of Terre Haute, on the eastern side of the Wabash, and consequently in the State of Indiana. In approaching this new and apparently thriving town, from the east, over the national road, the eye is filled with the prospect of an extensive plain entirely destitute of all timber-trees, and stretching to a great distance both above and below the town. Such a view, agreeable at all times, was peculiarly so as it opened suddenly upon us just after emerging from the heavily wooded forest through which we had traveled all day. The Terre Haute prairie, however, has been all reclaimed, or rather, botanically speaking, desecrated by the hand of man, and no portion of it now remains in a state of nature. Corn, grass, small grain, and other cultivated crops now occupy the hundreds of acres, which lately bloomed and blossomed with indigenous productions; and almost the only relics of these to be seen, were occasion-

ally on the road-side, or in fence-corners, a few plants of *Verbena stricta* and *Vernonia corymbosa.*

Twenty miles west of the Wabash at this point, we met with the first prairie in a state of nature; and from this, extending northward to the Lakes, and westward to the Mississippi, they continue, increasing in magnitude, and interrupted only by occasional groves of timber, so as to occupy by far the largest portion of the central, eastern, western, and northern portions of the State of Illinois.

On fairly entering the prairie region, and reaching the centre of one of these immense natural meadows, the view presented to the eye of a novice in such scenery, is one of the most pleasing sort. But beautiful, imposing, and even grand as is this spectacle, I must own, that in a botanical point of view, I was disappointed! The Flora of the prairies—the theme of so much admiration to those who view them with an ordinary eye,—does not, when closely examined by the Botanist, present that deep interest and attraction which he has been led to expect. Its leading feature is rather the unbounded profusion with which a few species occur in certain localities, than the mixed variety of many different species occurring any where. Thus from some elevated position in a large prairie the eye takes in at one glance thousands of acres, literally empurpled with the flowering spikes of several species of *Liatris*, among which the most predominant are *L. spicata*, *L. squarrosa*, *L. scariosa*, *L. cylindracea*, and *L. pycnostachya*. In other situations, where a depressed or flattened surface and clayey soil favor the continuance of moisture, a few species of yellow-flowered *Coreopsis* occur in such profuse abundance as to tinge the entire surface with a golden burnish. The species of this genus more commonly met with in such situations, were *Coreopsis trichosperma*, *C. senifolia*, *C. tripteris*, *C. palmata*, &c., &c. This peculiarity of an aggregation of individuals of one or more species, to something like an exclusive monopoly of certain localities, obtains even in regard to those plants which are the rarest and least frequently met with; for whenever one specimen was found

there generally occurred many more in the same immediate neighborhood. The *Dalea alopecuroides*, (Willd.), which I met with but once, was found in that locality in the greatest abundance. The *Satureja hortensis*, which I believe is not regarded as indigenous to North America, was seen once by us in the greatest profusion, and that, too, in a situation the least favorable to the idea of its having been introduced—the centre of a large prairie, where no settlement could have been made. At some places between Peoria and Springfield the road-sides and even the beaten path, were so completely covered over with the little *Boebera chrysanthemoides*, that, trodden under our horses' feet, it exhaled a strong and nauseating odor. In many such localities this noisome weed seems to take the place of the *Anthemis cotula* and *A. arvensis* (May-weed and Dog-fennel,) in the more settled portions of the Western States. In the neighborhood of Springfield, again, and especially in the out-lots of that town, we found the ground covered, to the exclusion of almost every other vegetation, with a small species of *Ambrosia* (*A. bidentata*) which, at the season in which we saw it, being out of flower, and ripening its dark-colored seed, gave to the common an aspect as dreary as "the bleak and blasted heath where Macbeth met the witches." In illustration of this peculiarity of the Botany of the prairies, I will only further remark that we did not observe the little *Erigeron divaricatum* until we reached Bloomington, in the commons of which town it is extremely abundant; and that it ceases to occur, or is but rarely seen, a few miles south of that.

There are, indeed, comparatively speaking, but few plants, except the grasses, (which are gregarious every where, and are intermixed in greater or less degree and variety among all the other plants of the prairies,) which may be considered as indigenes of the prairie region generally.—Among these we may mention, as occurring most constantly, and under greater diversity of soil and situation than any others, the *Silphium gummiferum*, *Parthenium integrifolium*, *Kuhnia critonia*, *Ceanothus intermedius*, (which here takes the

place of *C. Americanus* in the Barrens of Kentucky.) *Prenanthes Illinoensis, Eryngium aquaticum, Petalostemum violaceum, Dracocephalum Virginianum, Baptisia leucantha*, several species of *Liatris, Coreopsis, Aster,* Solidago,† Rudbeckia,‡ Helianthus,§ Pycnanthemum, Gerardia, Pedicularis, Gentiana*, &c., &c. Those two beautiful plants, for our knowledge of both of which, I believe, we are indebted to Mr. Nuttall, the *Aster sericeus*, and *Amorpha canescens*, are very generally diffused, but not in the same abundance with many others. Indeed, they constitute an exception to the habit of congregation which obtains among so many of their associates.

As is the case, I believe, with the American Flora throughout the United States, and, indeed, the whole Continent, the autumnal botany of the prairies exhibits a large preponderance of the *Compositæ*. Besides those already mentioned, we may here enumerate, as of frequent occurrence, *Chrysopsis mariana, Helenium autumnale, Boltonia glastifolia and B. asteroides, Bidens frondosa and B. chrysanthemoides, Eupatorium serotinum, E. aromaticum, E. ageratoides, E. purpureum, E. perfoliatum*, &c., *Cnicus glutinosus, C. Virginianus, C. muticus, C. altissimus*, &c., *Silphium laciniatum, S. integrifolium, S. terebinthinaceum*, &c., *Prenanthes aspera, P. virgata, P. racemosa, P. serpentaria*, &c., *Vernonia fasciculata, V. corymbosa*, and one or two other species.

In a farmer's, or rather a grazier's estimation, the grasses would be regarded as the most valuable of the natural productions of the prairies; and we will next mention some of

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* *Aster lævis, A. Novæ Angliæ, A. rigidus, A. gracilis, A. phlogifolius, A. concolor, A. azureus, A. undulatus, A. multiflorus, A. oblongifolius, A. turbinellus, A. carneus*, &c.

† *Solidago rigida, S. nemoralis, S. graminifolia, S. Ridellii, S. serotina, S. speciosa, S. Ohioensis, S. neglecta*, &c.

‡ *Rudbeckia purpurea, R. laciniata, R. hirta, R. subtomentosa, R. pinnata*, &c.

§ *Helianthus angustifolius, H. rigidus, H. occidentalis, H. grosse-serratus, H. tomentosus, H. mollis, H. pubescens, H. microcephalus, H. tomentosus, H. latiflorus*, &c.

those which are of most frequent occurrence, omitting all reference to the allied tribe of *Cyperaceæ*, but few of which were observed, in consequence, perhaps, of the late season at which our visit was made. Among the most predominant of the *Gramineæ*, on the rich, dry, and rolling prairies are several species of *Andropogon*, as *A. furcatum*, *A. ciliatum*, *A. mutans*, *A. scoparium*, &c., *Aristida tuberculosa*, *A. stricta*, *A. gracilis*, &c., *Elymus Canadensis*, (var. *glaucifolius.*) *E. Virginicus*, *E. mollis*, &c., *Trichodium laxiflorum*, and *Vilfa heterolepsis*. In flat and marshy situations these give place to various species of *Panicum*, as *P. geniculatum*, *P. agrostoides*, *P. dichotomum*, *P. virgatum*, *P. latifolium*, and the universally diffused *P. crus-galli*, *Leersia Virginica*, and *L. oryzoides*, *Spartina polystachya* and *S. cynosuroides*. All these grasses in their young and tender states are eagerly devoured by cattle: as they become harder and less succulent by age, the coarser are rejected and the more tender are sought for. Among these, I believe, the *Vilfa*, before mentioned, is a general favorite, both for grazing and for hay. All of them, however, are cut promiscuously for this purpose, and when they occur, as frequently they do, in large natural meadows, occupying the ground to the almost entire exclusion of other vegetables, they yield a productive return to the labor of the mower; and when well cured make excellent hay. Our horses, which had never before been accustomed to any other than the cultivated grasses, ate this natural hay with great avidity. The quality of these grasses, both for pasturage and mowing, is much improved by the burning of the prairies during the winter, which, destroying the dead and dry stems, affords a better and earlier bite in the spring, as well as a cleaner swath for the scythe: and by protecting certain portions of the prairie from the action of fire until the spring or early summer, vegetation is then so much retarded by a 'late burn,' as the settlers call it, as to afford good pasturage throughout the latter part of the season.

To this action of the fires, which probably for ages have annually passed over these plains, consuming in their progress

all relics of vegetable matter, both woody and herbaceous, is perhaps to be mainly ascribed the color of the soil, which for the most part is literally as black as coal, and in some situations of two or three feet in depth. And to this excess of carbonaceous matter, imparted to the soil of these prairies, is it perhaps to be ascribed that their productions, both in cultivated crops and natural growths, are by no means so rank or luxuriant as one might be led to expect. The Indian corn, though well-eared, was not so tall as I have frequently seen it in Kentucky and Ohio, on lands apparently much inferior in fertility; the different kinds of small grain, though heavily-headed, had a much shorter straw; and many of the natural productions, common to the Illinois prairies and the barrens of Kentucky, were less luxuriant in growth than I have observed them to be in the latter district, though the soil of the barrens has not the same appearance of fertility. This subject deserves particular investigation, and an accurate analysis of the prairie soil might lead to very useful practical deductions. One of our fellow-travelers, a farmer by profession, ascribed the appearance, above mentioned, to a 'sourness' in the soil. But the amount of carbonaceous and alkaline matters resulting from such frequent burnings would rather lead to an opposite conclusion.

Among the œconomical and medicinal plants of the prairies may be mentioned *Gentiana ochroleuca*, the roots of which have somewhat the bitterness of the officinal species, (*G. lutea*, of Europe,) *Prenanthes serpentaria*, several species of *Liatris*, the tuberous roots of which are possessed of acrid pungent qualities, and *Eryngium aquaticum;* all these plants have a considerable reputation, which perhaps is but little deserved, against the bites of poisonous serpents, and hence they are known indifferently by the names of 'snake-root,' 'button snake-root,' rattle-snake's masterpiece,' &c. *Frasera verticillata* is not so frequently seen in the more open prairies as in the thinly-wooded barrens. *Polygala Senega* and *Asclepias tuberosa* are abundant in both these localities. The different species of *Silphium* mentioned, exude from their

stems a pearly resinous matter, very similar in appearance and sensible properties to turpentine, and used for the same purposes. The roots of the beautiful *Petalostemum violaceum* have a warm pungent quality, which suggested its employment, among the thousand other articles, in the treatment of cholera, and the plant is now known on the prairies as the 'cholera-weed.' Our two most valuable indigenous bitters *Eupatorium perfoliatum* and *Sabbatia angularis* are abundant, and *Aristolochia serpentaria* is seen occasionally in the groves, where various species of dogwood (*Cornus*) are also of frequent occurrence. Mr. J. A. Lapham, of Wisconsin, informs me that in that territory, the *Amorpha canescens* is called 'lead-plant,' from the circumstance of its growth being considered indicative of the presence of that mineral. If the same sign should hold good in Illinois, the whole of the prairies may one day become a mining region.

Ferns are remarkably rare on the prairies; indeed I do not recollect having met with a single specimen of any species of that extensive tribe in the more open prairies. This may, perhaps, be owing to the absence of that shade and constant moisture in which most of these plants delight. On the skirts of the timbered tracts, several kinds occur, which are usually found in the barrens, as *Pteris aquilina*, *Polypodium dryopteris*, and *P. hexagonopterum;* and in the 'groves' I observed many other species common in the Western States. The same remarks will apply, in a good degree, to the tribe of mosses.

I deem it improper to close these desultory remarks, without giving a catalogue, at least, of other common plants, which presented themselves at different places on our route through the prairies. Some of them may have been already incidentally mentioned, but the most of them occurred under circumstances not calling for particular note or comment. They are given as I find them in my note-book, without any kind of order or arrangement.—

Verbena stricta,
V. hastata,
Gerardia purpurea,
G. flava,
G. erecta,
G. auriculata,
G. quercifolia,
Petalostemum candidum,
Desmodium, } of various species.
Lespedeza, }
Euphorbia corollata,
Gaura angustifolia,
Typha latifolia,
Cassia chamæcrista,
C. marilandica,
Monarda fistulosa,
Leptandra Virginica,
Lythrum hyssopifolium,
Pedicularis pallida,
Gillenia stipulacea,
Parnassia palustris,
Gentiana rubricaulis,
G. quinqueflora,
Sium latifolium,
Archemora rigida,
Artemisia caudata,
Polygala verticillata,
P. ambigua,
P. incarnata,
Linum rigidum,
Potentilla fruticosa,
Psoralea floribunda,
Bootia sylvestris,
Plantago cordata,
P. aristata,
Cissus Canadensis,
Chelone glabra,
Angelica triquinata,
Epilobium lineare,
Lysimachia revoluta, &c.

Doubtless many other species came under our observation, but being so common in other parts of the Western country, I omitted to note them.

In relation to the botany of the prairies, I have only to add a few remarks on the shrubs which are found among them; for although in the more open districts of this kind no ligneous or perennial stems are permitted to escape the ravages of the annual fires which sweep over them, yet on the margins of 'sloughs,' and along the courses of the small streams which occasionally meander through them, clumps of bushes and clusters of shrubbery are always to be found. These 'roughs,' as they are called, furnish welcome retreats to grazing cattle, and sometimes to the traveler's horse, from

that annoying pest of these regions—the prairie fly.* In these thickets the more common productions are the hazle, (*Corylus Americana,*) three species of sumach, (*Rhus glabrum, R. copalinum,* and *R. aromaticum,*) several dwarf kinds of plumb, (*Prunus,*) of which the species were not ascertained, two or three varieties of dogwood, (*Cornus sericea, C. asperifolia, C. alba,* &c.,) several species of undetermined willows, (*Salix.*) Besides these, may be mentioned the *Amorpha fruticosa, Zanthoxylum fraxineum,* (prickly ash,) *Prinos verticillata, Ilex prinoides, Aronia melanocarpa, Spiræa tomentosa* and *S. salicifolia, Symphorea racemosa, Cephalanthus occidentalis, Rubus*

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* I regret that I am not Entomologist enough to give the scientific name of this fly. It is, however, but too well known, both by name and its effects, to all those who have had the misfortune to pass through their haunts during the season of their prevalence, which begins in June, and only ends with the recurrence of hard frosts in the fall. I cannot do better, in this place, than to extract from the note-book of one of my fellow-travelers, his account of this tormenting insect:—

"At length fairly on the prairie, its ocean-like expanse—its multifloral hues, and the strange aspect of everything around us, especially of the far-off head-lands of timber, melting into the horizon with 'the mist of blue' which distance gave them, caused us all for some moments to be mute with rapture and admiration; from which delightful trance we were soon aroused by observing the woeful condition of our panting and stamping horses. In fact every part of them not protected by cloths, was covered by blood-thirsty—blood-sucking flies. These insects, unlike all others of their kind I have ever seen, fall upon their prey without buzzing, circumvolation, or prelude of any sort: they dart with the rapidity of shot from the fowler's gun, and as soon as they have touched the animal on which they alight, seem already bedded in his skin, from which they are not to be dislodged but by main force and violence. So greedy were they, and so intent upon one sole object, that they suffered themselves to be pinched off the horses; and so perfect seemed their blood-sucking apparatus, that hardly had they alighted an instant, when on being brushed off, they appeared already gorged with their sanguine food. Vengeance on our part, and commiseration for our horses, induced us frequently to stop, for the purpose of slaughter; and in a few moments our blood-stained hands, and the heaps of slain in the road, gave evidence that we spared not, and were as merciless as the foe whom we encountered.

villosus, (blackberry,) *Ribes rotundifolium*, called Illinois gooseberry, of which the fruit, though spinous, makes a delicious tart; together with various species of wild roses, grape-vines, &c.

Though not properly falling within the compass of this communication, the object of which has been to give some account of the autumnal botany of the prairies, yet before I close it, I will venture to add a few remarks on the forest trees of Illinois. These, in the main, do not differ from the productions of similar districts in the timbered lands of Indiana, Ohio, Kentucky, and Tennessee. In Illinois, the richest groves, interspersed through the prairies, are constituted mainly of the same kind of trees which indicate the best soils generally in the Western States, as black walnut, hickories, hackberry, (*Celtis crassifolia.*) sugar-maple, pawpaw, (*Porcelia triloba.*) &c. The thinner lands are clothed chiefly with oaks of various species, hickories and gums, (*Liquidambar*

We thought, too, at first, that we were relieving our horses, *pro hac vice* at least, of their torturing assailants; but a very little observation soon made it manifest that where we killed one, a dozen more keen and insatiable would arrive. So there was no way of stopping with a view to relief—the gauntlet had to be run, and the sooner it was over the better. Indeed, an old prairie traveler afterwards told us, in answer to our wonder, expressed at the naked condition of his horses, that the worse the flies were the more rapidly he drove. Such a course, however, appeared to us inhuman; and our horses, good and true though they were to ever looked through a halter,' gave evidences that they were not used to such leeching; and we were truly glad when, nine or ten miles on our road, a resting-place presented itself on the skirts of a forest. It is a most fortunate circumstance that these flies do not infect the woodlands, though immediately adjoining their haunts in the tall, thick herbage of the prairies; and we were told that so disgusted are they with the odor of a stable, they will not pursue an animal that takes shelter in one, however rudely and openly constructed of common round logs, without any *chinking* of its various apertures. From my recollection of Western stables generally, I think this fly evinces a great deal of good sense in avoiding them. It is, indeed, a clean, bright, and beautiful insect, of variegated green-and-golden burnish, about the size of, and not unlike the Spanish blistering fly."—*MSS. Notes on a Tour through Illinois, by* J. Cleves Short.

styraciflua and *Nyssa* of two or three species,) whilst the poorest soils, those especially of the 'bushy barrens' and 'oak openings,' are occupied mostly with the different kinds of oak, among which the post-oak, (*Quercus obtusiloba*,) and black-jack, (*Q. ferruginea*,) are most prominent. I am able, indeed, to indicate but two trees which are in any way peculiar to the forests of Illinois; and these are the paccan and catalpa. Of these the paccan (*Carya olivæformis*,) is found abundantly on the southern borders of the State, where about Shawneetown and other points on the Ohio river, it constituted a large portion of the original forest; and from these districts great quantities of the nuts have been exported. They are not considered, however, to be equal, either in size or flavor, to the paccan-nuts of Texas. The other tree—the catalpa, (*Catalpa cordifolia*,) I have the authority of General Harrison for saying, is found occasionally, and of large size, in the alluvions of the Wabash river, where he considered it to be certainly a native; in opposition to the opinion of the Abbé Correa, who thought it more probable that the seeds may have been derived from trees planted by the early French settlers of Vincennes and other posts. I have seen this tree in similar alluvions among the dense forests of Henderson county, Kentucky.

Whilst walking over the prairies adjoining the town of Bloomington, in company with our friend Dr. John F. Henry, who resides there, he pointed out to us an extraordinary phenomenon in connexion with vegetation, and one only visible, I suppose, in a prairie country. It was a semicircular, or rather horse-shoe-shaped line of herbage, distinguishable very plainly from the surrounding and included growths, by its darker or deeper green hue. He said that these circles or segments of circles, usually of fifteen or twenty feet diameter, were frequently to be seen in summer, and that it was generally believed they were occasioned by lightning. He described the thunder-storms of this region as sublimely majestic and terrific. We had no opportunity of witnessing this display of Heaven's artillery, during our journey; but

in two or three instances afterwards, I think, we observed this singular appearance of the grass on the prairies, indicating what might, perhaps, without impiety, be called 'the foot-prints of the Deity!'

Very respectfully and truly, I am,
My dear Sir, yours,
C. W. SHORT.

Professor DRAKE,
Medical Institute of Louisville,
February, 1845.

ART. II.—*A Case in which a sharp-pointed body was swallowed by a child, passing the bowels without injury.* By B. W. AVENT, of Murfreesboro', Tenn.

On Thursday evening, 8th July, I was requested to visit a little girl, four years old, who, whilst engaged at play, had accidentally swallowed a sharp-pointed instrument, about two and a half inches long. This instrument was originally the handle of a long-bladed knife, the jaws of which had been filed off about its centre, leaving the back-spring, which had been ground very sharp at its point.

I saw the patient an hour after the accident had occurred, and as might have been expected under such circumstances, found the family in great alarm, and in the act of preparing an emetic, with a view to cause the stomach to eject this foreign body.

The little girl was suffering no pain at all, and on examination I was satisfied that the instrument had passed the cardiac orifice without producing any injury in its passage. Aware that the point of this instrument was sufficiently sharp to penetrate the stomach, should it come in contact with it during any contractile action of that organ, I at once explained to the parents the great danger of medical interference, and advised that the unassisted efforts of nature should be relied upon for relief, at least until some unpleasant symptoms

should arise. With this advice, I left the patient about as comfortable as if nothing unusual had happened.

On the following morning she complained of some pain in the epigastrium, but it was not of sufficient violence to excite much alarm. She took her breakfast as usual, and was permitted to engage in her accustomed amusements. After the morning, the pain in the stomach subsided. Sometime during the day her bowels were evacuated, without presenting any unusual appearance in the fæces.

On the next (Saturday) morning, she was still well, had no fever, or visceral excitement whatever, and had complained of no pain since the morning of the previous day.—Through this day she continued to be playful, and suffered no inconvenience. The bowels were once moved without medicines.

Sunday morning.—Patient still free from all excitement. At 9 o'clock this morning, just 64 hours after the occurrence of the accident, the instrument was discharged from the bowels, enveloped in fæces, without any pain, or inconvenience whatever. But little, if any, visible impression had been produced upon it during its passage through the bowels.

In the management of this case I applied no medical treatment, though often solicited to do so. I advised that the little patient should be permitted to engage in her customary amusements, and to take her ordinary diet, hoping by this course to keep her system, as nearly as possible, in a normal condition, the natural action of the alimentary canal undisturbed, and that thus, as happened, the 'unwelcome visitor' might be expelled.

Medical interference, in this case, would have consisted either in vomiting, with a view to the ejection of the contents of the stomach, or in the use of purgatives, more speedily to evacuate the contents of the bowels. In either plan of treatment there would have been great danger to the patient. The contraction of the stomach, necessary in vomiting, would undoubtedly have endangered the wounding its coats, by coming in

contact with the sharp point of the instrument, at every effort of that character, to say nothing of the great improbability of effecting the object desired; whilst, on the other hand, cathartics would not only have produced irritation of the bowels, but by carrying off too hastily their fæcal contents, might have left the foreign body behind, in a condition to wound them at every peristaltic motion.

Two circumstances existed in this case which favored the safety of the patient. First, the instrument was swallowed with the handle or blunt end downwards, which prevented its wounding the parts in its passage; and, secondly, its length prevented its taking a transverse position; either of which circumstances might have greatly endangered, if not destroyed, the life of the patient.

Murfreesboro', January, 1845.

REVIEWS.

Art. III.—*Medical Topography of Brazil and Uruguay:* with incidental remarks. By G. R. B. Horner, M.D., Surgeon U. S. Navy; Honorary Member of the Philadelphia Medical Society, and Corresponding Member of the National Institute at Washington. Philadelphia: Lindsay & Blakiston. 1845. 12mo. pp. 296.

An interesting book might be written on this subject. The countries are comparatively unexplored by medical men, and all that might be described in them as pertaining to our profession would have the advantage of novelty. The work before us, has been compiled by a young physician, from the private and public journals kept by him during two cruises, and embraces a large amount of matter having no reference to medicine. But a small portion of the work, indeed, is strictly professional, the principal part being made up of details similar to those which find a place in the diaries of all travelers. But some of his descriptions have interest for the medical man, and from these we propose to select such as appear to us to afford the most valuable information.

We begin with his description of some of the vegetable productions of Brazil, which he represents as being exceedingly exuberant. In a single acre of uninclosed land, it will often happen, he remarks, that the traveler will see more plants than he can examine carefully in many months. Of the cactuses alone, 400 species are said to be found there,

growing upon the most barren rocks, as well as on the most fertile fields, in the moistest places, and in the dryest, in shade and in sunshine, but never beyond a certain elevation on the mountains. He gives the following interesting account of the banana:

"Of the banana, I will observe that three species are to be had, a small and a large yellow one; and a third larger than either, and of a reddish color. One of them is the fruit of the Musa paradisiaca, and two that of the Musa sapientium. The entire plant is termed bananeira by the Brazilians. The three species are alike, and are not easily distinguished. Each of them has a pithy, stout stalk or trunk, enveloped by the stems of its immense leaves, and the fruit of all is borne in a grand cluster, disposed in radiated bunches, inserted into the top of the stem, one above the other. As this continues to grow, flowers in half circles are displayed below its conical apex, from beneath one of the lowest leaf-like scales, half enveloping the base of the cone. Every flower becomes a banana; and after this, a scale on the other side of the cone parts from it, and simply adhering by its base, allows another semicircle of flowers to bloom; and thus a conical branch, composed of many circles or radients, is eventually formed, and bows the top of the stem so much as nearly to make it double. The banana is a most wholesome fruit to people generally; but if eaten largely, sometimes creates indigestion, and in moderate quantities produces costiveness—an effect owing to its astringency. This quality abounds in the whole plant, and having now become known to the Brazilian farmers they avail themselves of it for the cure of disease. To hasten suppuration and the pointing of abscesses, the fruit is fried, mixed with a little oil of sweet almonds, and applied as a cataplasm. The juice is most used as a remedy. It contains gallic acid, and according to two French chemists, Fourcroy and Vauquelin, nitrate and oxalate of potash, and is employed externally and internally. The complaints treated with it are leucorrhœa, prolapsus ani, atonic wounds, aphthæ, swelling of the legs and testes. For the cure of leucorrhœa it is employed thus: A stalk is divided at the middle by a horizontal cut; the upper end of the part remaining in the ground is scooped out and filled with sugar; this becomes saturated with the juice, in a few hours forms a syrup, is taken out in any suitable vessel, and given in a dose of a tablespoonful three times a day, or oftener according to circum-

stances. In treating prolapsus ani and hemorrhage from the rectum, it is used in the form of a clyster or lotion in town, but in the country the people, when affected with the former complaint, cut off the bananeira in the middle, sit upon the stump, and allow the affected part to remain from a quarter to half an hour in contact with its upper surface."

He gives a brief but interesting account of the coffee-tree which we extract:

"Of coffee I also will speak briefly, as its history is known generally. Most of it and that of the best quality grows upon high grounds, the sides of hills and mountans, up to a certain height, but does not prosper on the summits of even those of medium height, from the coldness of the air upon them. I have not seen it growing more than two or three thousand feet above the level of the sea. After the ground has been prepared, by cutting down trees and bushes and burning them, the coffee scions are planted in rows. These are near together; only enough space is left between them and the scions to allow the trees to attain a full size, and the fruit to get ripe. When so, it is blood-red, rather less than an inch long usually, and of half the diameter. It has a thin, pulpy skin enclosing the kernel, has a sweet, gently astringent, and aromatic taste, and is a favorite food for children. Many coffee trees grow along fences, and attain there the largest size, but the highest do not exceed fifteen or twenty feet. When the fruit is mature, and often when not, it is plucked, spread out to dry on rocks and scaffolds, then pulled and sifted: now and then it is allowed to get wet with rain, looses its greenish color, is not so plump, and less valuable in market; but by many of the best judges of it, is more highly esteemed than the green. Of the two kinds more than a million of bags are exported annually from that country, and its inhabitants consume many thousand bags besides. The total amount of coffee produced in Brazil in 1843, is estimated to have been the enormous weight of 170,000,000 of pounds, or about a third of what is produced in the whole world."

But we leave these subordinate matters to extract the account given by the author of the *Organization and Statutes of the Medical Schools* of Brazil, which, we are sure, will be

new to most of our readers. These are two in number, one of which is situated at Bahia, and the other at Rio. The latter is the principal one, and Dr. Horner gives the following description of it:

"Shortly after King John VI. fled from Portugal, and in the year 1808, he established in Rio a school of anatomy, surgery, and medicine. This school continued until the organization of the college of medicine and surgery by Pedro I. September 20th, 1826; and in October, 1832, the year after his abdication, the latter school was abolished in name, and reorganized under its present title: Escola de Medecina de Rio de Janeiro. This change was effected by the regency of the Empire during the minority of Pedro II.

The faculty of the school are the following physicians, viz:—

Director.

Manoel de Valladao Pimentel.

Lent Proprietors, or Professors.

First Year.

F. F. Allemao—Botanical Medicine and Elementary Principles of Zoology.
F. de J. Candido—Physical Medicine.

Second Year.

J. V. Torres Homem—Chemical Medicine and Elementary Principles of Mineralogy.
J. M. Nunes Garcia, (*Examiner*)—General and Descriptive Anatomy.

Third Year.

D. R. dos G. Peixoto—Physiology.
J. M. Nunes Garcia—General and Descriptive Anatomy.

Fourth Year.

J. J. de Carvalho—Pharmacy, Materia Medica, especially Brazilian, Therapeutics, and the Art of making Formulæ.
J. J. da Silva—Internal Pathology.
L. F. Ferreira—External Pathology.

Fifth Year.

C. B. Monteiro, (*Examiner*)—Topographical Anatomy and Preparations.

F. J. Xavier—Midwifery, Diseases of Pregnant and Lying-in Women, and of Infants recently Born.

Sixth Year.

J. M. da C. Jubim—Legal Medicine.
T. G. dos Santos—Hygiene and History of Medicine.
M. de V. Pimentel—Internal Clinics and relative Pathological Anatomy.
M. F. P. de Carvalho—External Clinics and relative Pathological Anatomy.

Lent Substitutes, or Assistant Professors.

A. T. d'Aquino, A. F. Martins, } Section of Accessary Sciences.
J. B. da Rosa, (*Examiner*) L. de A. P. da Cunho, } Medical Section.
D. M. de A. Americano, L. da C. Feijo, (*Examiner*) } Surgical Section.

Secretary.

Dr. Luiz Carlos da Fonseca.

"Besides the above persons employed in the school, are a librarian, treasurer, porters, messengers, and servants.

The course of instruction begins on the 1st day of March and ends on the 20th of December; on which days the whole faculty meet. They likewise do so whenever the director thinks it necessary, and summons them. He is elected by the faculty from among the professors. Some of the substitutes are allowed to vote for him, but none of them can be a candidate. The ex, or pensioned professors, when invited by a majority of the faculty, can deliberate with them, and are entitled to attend the meetings at all times. The meetings are ordinarily secret, and continue two hours; and the acts of the faculty, when exigency requires, are also kept secret. The faculty are empowered to judge of violations of the statutes of the school by any of the members, students, and persons employed in it; and before consideration of the case is made, may allow eight days to collect testimony. Should the director be guilty of misconduct, the faculty, when it is recommended by a committee of three professors, and the proposal has been taken into consideration, nominate another committee of three, to examine into the matter; and if the director be found guilty, his misconduct is made known to the government. Should he be proved not guilty, he forth-

with resumes the discharge of the duties of his office. Should he not be acquitted, and the case be referred to the government, it may reinstate, suspend or dismiss him.

"Every professor receives a salary from government of 2,000 milreas* per annum; the substitutes receive 1,200, and the director 3,000 milreas, as he acts both in the capacity of president and professor, and has the supervision and administration of the school. After twenty years service every person can retire on a pension for life; and before the expiration of that time, should bad health prevent a further discharge of the duties of his office.

"Professors and substitutes after twenty years, counting from the date of their nomination, receive pensions for life equal to the whole amount of their salaries. Should any one of them, from age or sickness, be incapaciated from duty within the first ten years of service, he receives a pension amounting to a half of his salary; and should he be disabled between ten and twenty years of service, his pension is proportionately increased. Another very liberal provision is made for the faculty. If any one having completed his twenty year's service desire to continue on duty, he can do it with the authority of government, and is given an increase of a fourth of his salary; and if he be able at the expiration of four years to discharge his duties, he continues to do so upon being again authorized by government, and during the second four years receives another fourth part. The same is done at the expiration of eight years, as long as the professor or substitute continues in office; and when at last he is no longer able to keep in it, he goes into honorable retirement, and has a pension equal to the whole amount of salary received at the time of resignation.

"Rank among the faculty is determined by the dates of nomination, or by the time they entered into office, and when they were nominated at the same period, the person takes rank who first received the degree of doctor. None others than Brazilians can be appointed members of the faculty.

"Exchange of chairs can be made by them with the approbation of government, after the faculty have taken the exchanges into consideration and determined that they would be beneficial to instruction. When it has been determined that an exchange may take place, the decision is sent to gov-

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* About $1,100; the value of the milrea being reduced to about 55 cents. At par it is worth about 100.

ernment to receive its confirmation; and when it is made the exchange is published in a newspaper. In case of a chair being vacated by death, retirement, suspension, or dismissal, the same form as the preceding is observed; the person thought competent is nominated by the faculty, and if approved by it, receives his title from government. To fill vacancies the school is granted three honorary professors and six honorary substitutes. In appoinments to the former distinction, substitutes who have served twenty years have the preference; and for the honorary substitutes doctors of medicine who desire to travel at public expense for scientific information, and gives satisfactory proofs of merit, and scholars of the practical school* who have received six premiums during the session, are preferred. The honorary professors and substitutes as well as the effective ones receive their titles from government. Substitutes of the former kind can confer with the latter, and supply their deficiencies in teaching without taking an active part in council.

"For an effective substitute three kinds of election are held: one for the accessary sciences; a second for surgery; a third for medicine. A candidate for the place must be a citizen of Brazil, and in the enjoyment of civil rights. He must also show a diploma conferred or approved by one of the faculties of Brazil, and produce testimony of good habits, attested by a justice of the peace in his district. Within eight days after the vacancy occurs, the director having received the approval of government, makes known by advertisement that the chair is vacated, and an election to fill it is to be held, and mention the qualifications required. Six months are allowed to furnish them: and within that period applicants have to forward the necessary documents; and such as are permitted to be candidates are enroled by the secretary, and have their persons identified by the director. Fifteen days before the expiration of the six months the secretary announces that the enrolment will be ended on the first day after the above period is terminated; and when this has hap-

* The practical school is nothing more than a part of the school of medicine, but is formed of another faculty; composed of a regent and 12 pensioners, with any number of scholars, who assist the professors in making preparations, dissecting, and experimenting in chemistry, pharmacy, &c., &c. The regent has a salary of 800 milreas for his services; and the pensioners 200 each. By pensioners here we are to understand simply graduates of the school of medicine, employed and paid by government, and not ex-professors drawing pensions.

pened he sends a list of candidates to every member of the faculty. Three days subsequently to the closure of the list a council in secret session is held, the list is read, and an examination made respecting the morality of the candidates. A secret vote is then given on them for their admission or rejection; which last is the lot of him who does not receive two-thirds of the votes of the members present. The director after the session gives an account to government of the decision of the faculty. Should no candidate be admitted, another announcement of the vacancy is made, and a period of three months more allowed the applicants to furnish the necessary credentials.

"The faculty are the judges of the election; but no member can vote who is the father of a candidate, or his relation within the second degree of consanguinity. The director acts as president of the jury, as it is called, watches over the mode of election, gives admonitions if order be not observed and can suspend the proceedings and cause the expulsion of the offender should he be a candidate, an alumnus of the school, or a stranger. The session may be continued or deferred after a new deliberation, and the director reports the whole affair to government. After preliminary proofs of merit have been given, the election of candidates proceeds; and they have to furnish actual evidences of their professional qualifications and ability to discharge the duties of the vacated chair. The first evidence is a written discourse in the presence of the jury on one of four subjects, selected the evening before the election by a committee of three members, and placed in an urn, after being read to the board. The subject drawn is the one on which the lecture must be written; and this must be done on the same day. The candidate also has, within twenty-four hours after the lot is drawn, to deliver an oral discourse upon the subject named; he must, moreover, deliver a thesis on some professional subject, and give practical proofs of being qualified for the place he seeks, and especially with regard to the subject of the thesis. On a fixed day the candidates in succession ascend the magisterial chair of the hall and deliver their written discourses, and three days after them the oral ones. At the expiration of three months from the last of the latter, the examinations upon the theses are made, and the candidates are held responsible for the moral and legal sentiments expressed in them; and forty-eight hours before the recitations they have to furnish sixty copies of their theses for the use of the faculty and for other purposes. After the candidates have read and defend-

ed their theses, the professors examine them upon them until satisfied, and then proceed to ballot; first, to decide whether the candidates be worthy of the appointment; secondly, which of them is most worthy. If there be one candidate only for the place of a substitute, a majority of one elects him; if there be two candidates the one who has the plurality of votes in three ballotings, becomes the substitute. When the election is decided, no objection on the part of the candidates is noticed, unless some informality occurred, and in this case the matter is reported to government. Should it ordain a new election, it is held, and the same candidates are taken into consideration by the faculty. But no election for the professor is held, if there be only one effective substitute who seeks it, nor does the election take place if there be not present in all the sessions, at the time the election should commence, the legal number of effective substitutes. Other modifications are made in the election of a professor;—first, effective substitutes are permitted to become candidates, and when the former are wanted, honorary substitutes are taken. Secondly, the period for qualification is only two months, the morality of the candidates is not previously judged, the written discourse is upon twelve questions, six of which relate to the different branches of medical instructions; and if the election be for a vacancy in a clinical chair, the oral discourse will be made on patients, designated in the hospital of Miseracordia.

"Finally, with respect to elections, I will state, that if they be for a physician to travel at the expense of the State, they are done in conformity to law, and after the manner determined by the faculty; but not before notice has been publicly given for twelve months previous to them, and the conditions of the travel have been made known at the same time.

"But the examinations are not confined to the professors, substitutes, nor their pupils. Every graduate of former Brazilian schools, before he can receive a title or diploma, has to present to the director such diploma, must identify his person, show the receipt of the treasurer for the matriculation fee, and the certificate of the same that the applicant has deposited with him the practical observations required. Native and foreign practitioners are obliged to produce certificates of identity and naturalization; and practitioners settled in the country previous to a resolution adopted October 27th, 1835, are required, if they wish to continue in practice, to produce

the above documents, and likewise their passports, or the certificates of their consuls, signed by the police of their place of residence in Brazil, declaring the day, month, and year of their arrival in the country.

"All physicians, surgeons, apothecaries and midwives who have settled in it the above time, or who may hereafter do so, must, before they begin practice, undergo a theoretical and practical examination. These examinations are conducted as those of the school—by two professors and a substitute, save that respecting the thesis; this examination will be made by three professors and two substitutes; but the faculty are empowered to dispense with the thesis, and establish any other proof of competency. Surgeons are first examined on anatomy, external pathology, and parturition; and secondly, are clinically questioned on two surgical cases, and obliged to perform any operation required. An equally strict examination of physicians takes place; and apothecaries are required to prove their knowldge of the materia medica, and then make the pharmaceutical preparations determined upon by the faculty. Should the examinates be approved, the director confers the same titles as on the graduates of the Fluminensian school; but if the examinates are rejected, they lose the fees deposited, and have to undergo another examination, after the same fees have been again paid, and six months have elapsed.

"From the above facts, it is evident that Brazil, though far behind the United States and other countries in most respects, has some excellent laws relative to its faculty. She affords the greatest encouragement to native talent and professional attainments, and does not allow herself to be inundated by crowds of empirics and illy educated members of the profession of medicine, who may be attracted to her shores by hope of gain, or of a reputation to be attained by their imposition, and then maintained by the credulity of the people. In this restraint on adventurers, the Brazilians consult not only the true interest and happiness of themselves at large, but especially benefit the faculty of the empire; and, moreover, protect from extortion and unnecessary pain such of its subjects as are poorest, and most apt of all others to be duped by either foreign or domestic empiricism. No cry in Brazil is heard against monopoly in the practice of the healing art, by its confinement to a few persons; nor do the faculty take advantage of such monopoly, and charge exorbitantly for services. On the contrary, they leave them to be valued by

the patients, do not send in bills,* nor employ collectors. Of course, whatever reward they receive proceeds from a sense of duty and obligation, or from gratitude on the part of the sick or their friends. For exorbitant fees then they are solely to blame; and it is not probable that these occur often unless the Brazilians are different from most nations, and voluntarily reward physicians more liberality. Their custom of leaving their fees to the means and generosity of patients, no doubt influences them in paying larger fees than they would willingly if bills were presented; but, nevertheless, the incomes of physicians, including every branch of the healing art in Brazil, are not generally large; none that I have heard of are really great and the profession of medicine in the empire is neither distinguished for wealth, nor display in dress, equipages, fine dwellings in the city, nor gorgeous residences in the country; and though highly respectable, are not as fashionable in Rio Janeiro as in some of our Atlantic cities; nor, indeed, are they likely to prosper much should as great odium be excited by them as recently by a member of the profession, whose name remains unknown to me, but has the credit of killing a patient in September, 1842. Great was the excitement caused by the reports regarding the case. The family of the deceased were kind and generous enough to conceal the name of the physician, but the prescriptions were obtained in some manner and published. The last and finishing doses were—8 grs. of sub-nitrate of bismuth, given, with several less active articles, on the 13th and 16th; and these not having the desired effect, the following were presribed to be given from 2 o'clock, P.M., to 12 o'clock at night:

℞. Infusion of lime tree, ℥ii.
Tart. emet., grs.ii. M.

Next came tart. emetic, grains *twenty*, divided into 4 parts, and lime tree electuary, 3 ounces, taken with oil of croton tiglium, 5 drops. The parturient potion of Velpeau was afwards given, and then the patient was drenched with orange, distilled, and barley water, and took an ounce of the syrup

* This statement is inapplicable to the English physicians at Rio. They follow the customs of their country, have specific fees, and send in bills generally. The common fees for a visit is two milreas in the city, and four in the country, and ten milreas for attending a consultation. Among people well off, the price of an obstetrical case varies from 50 to 100 milreas, or from 30 to 60 dollars according to their present rate.

of orange-peel. It is hardly necessary to state, that the first named prescriptions were very active if not efficacious, and the patient was vomited and purged into the next world by daylight on the morning of the 17th.

"To continue my remarks on the faculty of the school, I will observe that they exercise entire control over the students within the precincts. Should one of them during a lecture or at another time disturb the peace, the professor can command silence; if he should not obey, the order is repeated at the same moment that the offender is called by name, and pointed at. Should this be insufficient, he is commanded to retire, or the professor leaves the hall and reports him to the director. Besides penalties incurred immediately for misconduct, the students are liable to undergo others at the end of the session. At this time any professor and substitute is required to present to the faculty a tablet of observations made on the conduct of students, and to confirm them by facts. The secretary keeps those tablets in the archives, where they are not allowed to be examined without the consent of the director, and are retained for the use of the faculty and government when occasion may require. The faculty themselves are liable to punishment for misdemeanors, such as offences against public morals, neglect of public duty, and conduct notoriously scandalous and compromising their honor. A professor, for instance, who, three successive times, and without the consent of the director, or without just cause, should fail to discharge his duties by not lecturing, is liable to be brought before the academical council by the director or three professors, and to be fined in a sum equal to his salary during the days he has not performed his duties.

"The statutes with respect to students are precise. Offences are strictly defined, and severely punished when aggravated; and for the information of the students the penalties to be incurred are written down opposite acts pronounced offences. Thus, non-attendance at a whole lecture incurs one point or mark from the professor or substitute in the chair; making a noise, especially during a lecture, incurs one or two points; non-attendance to an examination is noted down, and punished by the offender being examined last, and fined ten milreas; departure before the end of a lecture and scholastic exercises requires an explanation, and receives one point from the professor present; irreverence, tumult, lampoons, caricatures, obsceneness, acts of cruelty towards the patients, offences against public morality or modesty, libels, disobedi-

ence to the order of the director, mockery and ridicule of the professors, substitutes, or attendants of the school; any attack whatever on them, any marked insubordination, affronts to fellow-students in the precincts of the school or without them, are punished by points and reprimands, and by temporary or permanent expulsion from the school, after the government has been informed of the circumstances and has given its approval."

He adds to this an account of the ceremony of conferring the diplomas upon the graduates, the conclusion of which is striking. The address of the president, and of a graduate who follows him, over, and the medals, bouquets, and diplomas, being distributed, an oath follows:

"The oath taken was the following: 'In the presence of the masters of the school and of my fellow disciples, I—F. H. de Mouro—swear on the Holy Evangelists, that in the practice of medicine I will be faithful to the laws of honor and probity.' Then he places his hand on the works of Hippocrates, and continues: 'I promise on the works of Hippocrates that practising into the privacy of families my eyes will be blind, my tongue will keep the secrets confided to me; never shall my profession serve to corrupt good manners nor to favor crime. Grateful to the masters who instructed me, I will honor them in life and respect them in memory. I will guard, as my own, the honor of my colleagues, and will never deny them the fruit of my experience. The indigent shall never cry in vain for the succors of my art. I will employ all my zeal in the diminution of their sufferings. Let men recompense me as they think proper if I should be faithful to my promises; and let me be covered with opprobrium and disrespect by my colleagues if I should ever be wanting to them.'

"The oath taken, the president continues the ceremony by saying, 'Read and meditate on the works of the father of medicine. Regulate your life by him, and men will cover your name with blessings.' The president then hands the graduate a volume of the works of Hippocrates, thrusts a ring on his finger, and says, 'Receive it as a symbol of the degree I confer; you can practice and instruct in medicine.' Having pronounced these words, the president embraces the new doctors, and, as no one succeeds him, here ends the ceremony. When this happened bouquets again were distributed, the assembly displaying their trophies dispersed, and the canon

Januario, the venerable hoary-headed president of the National Library, known by a dazzling star of diamonds on his left breast, made off with one of the largest and handsomest bouquets. He looked as pleased as a bridegroom just blessed with a wife, and, though a bachelor, reminded me vividly of the marriage of Pope's January and May, when I saw his grey head and fine flowers and was told his name."

A notice of the hospitals at Rio follows his account of the medical school. Here he saw numerous cases of leprosy, or elephantiasis, as it is differently called, of which he gives a graphic description:

"Of the nature of this disease I will speak another time; and now will merely state that I found twenty-five females and seventy-three males in the hospital affected with it, and most of them were adults; among them were some most distressing objects. Frequently one part of the body had become preternaturally enlarged while another had wasted away. Some had lost their noses, while the lips had grown to a great size, or the ears had attained almost that of a young elephant's. Others had the whole face enlarged, their legs swollen and covered with scales; while another set had lost an eye, and had it covered by a fleshy substance like fungus. A black woman had lost one foot and all the fingers, except the first phalanges, and these were flexed on the palms as if burnt by fire. Such was my impression at first sight, but on close examination and inquiry I detected my error. Several had no nails to their fingers, and these were gradually decreasing, though no sign of ulceration was perceptible. In fine, notwithstanding a number of miserable beings had their limbs enlarged, none of them had their bodies really corpulent. On the contrary, they were commonly emaciated, and indicated the want of sustenance, rather than a superfluity."

In another place he continues:

"Elephantiasis exists in every form and degree; spares no sex, age, nor condition; pays no respect to natives or foreigners; affects the poor and rich; harasses servant and master; affects the plebeian and patrician. The poor and laboring classes, however, are most annoyed by this disease; and the negro population, both the slaves and free portion, have a full share. The persons most affected with elephantiasis, strictly

speaking, and according to the derivation of the name, are those who live miserably, or are obliged to make much use of their feet, and have them frequently, and for a long time, exposed to the sun without shoes or anything else to protect them. One of the best evidences of this fact was, that I knew a sailor to bring on a violent inflammation and swelling of his feet similar to elephantiasis from such exposure. Had the irritation been kept up, I have little doubt a chronic affection would have been induced, and a permanent enlargement taken place. I have observed, also, that the laboring class of people, particularly men who stand or walk much, and women who are in the habit of washing clothes and immersing their hands in hot water or other warm fluids, have them or their forearms affected."

"Of the two forms of elephantiasis it is not easy to say which occasions the most inconvenience to the sufferers; for one lops off his members, the other enlarges them to an enormous extent; and both deprive of the means of obtaining a livelihood; one by a deficiency, the other by an excess. A seamstress and shoemaker lose their fingers by one form of the disorder; a footman and porter have their legs and scrotum so much increased by the other that the former can only stand, and the latter has as much as he can carry about his own person. A belle, ambitious of having the smallest of feet, the most delicate of ankles, has them converted into stumps, or such heavy clubs, that all elasticity of gait is destroyed; and so far from dancing well, cannot walk with common grace. A beau, desirous of displaying his finely-formed features, and causing every belle to look with admiration at his noble Roman nose, his expressively dark eyes, has the former converted into a genuine pug, or insignificant Grecian; and only one of the latter is left to view the ruins of the once sublime bridge, and the extinction of its fiery fellow orbit.

"Cases of scrotal elephantiasis are nearly as numerous, if not quite as much so as those of the feet; and the first attain the greatest magnitude of any other form. One or more instances have occurred where it was so large that a wheelbarrow was requisite to carry it; and two cases I saw of it were about four feet in circumference. One of them was that of a negro in the Miseracordia; another that of a late officer of customs, who resides in the Rua dos Bazotes, or Busson's street, which takes its name from the number of such persons residing on it. Dom Francisco H. C— had been afflicted with the complaint only three years, and he, nevertheless, had

the scrotum formed into a vast tumor of nearly the natural shape of the part. The skin was quite firm, smooth, of a reddish-white color, and felt soft, but was firm and elastic; the prepuce spread out six or eight inches around, and divided into irregular lobes, semitransparent, fungous, and entirely concealing the glans. This was embedded in the mass. His feet and legs just above the ankles were correspondingly enlarged. The first were too big for shoes, and protected by moccasins; the second were bottle-shaped, and a linen sac supported by straps held the unwieldy scrotum. Dom Francisco is no longer able to obtain a livelihood by labor, and receives alms privately. His age is fifty-six years; and as his chin and face are becoming affected more and more, he must expect to spend the rest of his life in misery beneath the weight of his irremediable disease.

"The treatment adopted to cure this or other forms of it is illy defined and unsuccessful—a mishap to be expected, since the causes are continued, and the local complaint often depends on a constitutional affection. Lotions are the chief medicines employed, and excision has been occasionally practised. A scrotum, weighing, it is stated in the Fluminensian Medical Journal, 143 pounds, was removed, and the patient, at the time of the publication, was in a good condition. Whether he got well, is not mentioned by the journal, but I have understood he died from the operation. This has been since repeatedly performed, and it is said with success in some cases. Hence the operation can be properly recommended when medicines fail, and the disease progresses, provided the tumor has not attained as great size as above-mentioned; for its removal then requires a more extensive wound than the patient would probably be able to survive; and even if the tumor could be excised with perfect safety and certain success, it is extremely uncertain that the Bazotes would subject themselves to a long and very painful operation, and, moreover, pay a high price for removing a natural *card-table*, besides being put to the expense of buying an artificial one afterwards. This would be right-down extravagance; as it is stated, on good authority, that some of those affected with this form of elephantiasis are in the habit of sitting with the tumors before them, and using them instead of tables in playing cards. For this purpose a stool is placed under each tumor, unless rendered unnecessary by the owner sitting on the floor, or on a counter. The shopkeepers, least of all other persons, would allow the operation, when it would occasion the loss of an article of furniture so fashionable among them.

and especially as it causes them little inconvenience, is seldom in their way from their sedentary habits, and can be so easily kept upon or behind their counters, accordingly as may be necessary from the presence of male or female customers."

The climate of Brazil is a remarkably equable one. During 208 days, according to a register kept by the author, the range of the thermometer was only 25°. The period extended from June to January, in which time 63°, Fah., was the minimum, and 88° the maximum. This was on board the ship; on shore the temperature was several degrees higher. But of the climate of Brazil, says Dr. Horner, taken altogether, "it may be safely asserted that it is not excelled by the climate of any other country in the world of the same extent; and though it may be too warm for health or comfort at certain seasons, yet it is mostly unsurpassed in salubrity and agreeableness."

Our author describes Uruguay as very salubrious. He says:

"It is singularly exempt from fevers and other complaints caused by malaria; bilious, remittent, and intermittent fevers are scarcely known, and in the capital are said not to exist. Exemption from these diseases may be properly attributed to the want of marshes, swamps, and stagnant water, the undulating face of most of the state, and the dryness, if not the singular composition of the soil, and the nature of its productions. Rank vegetation is seen no where, and plants as well as dead animals parch up but do not putrify.

"A form of typhus fever, termed febre cerebral by the citizens, prevails sometimes at Montevideo, and in 1838 destroyed many of them treated after the ordinary method pursued there. Venesection proved a fatal remedy, and Dr. Carduret, convinced of this fact, forbid it altogether, resorted to less debilitating means, and acquired great celebrity by his uncommon success. I was told by a member of a family in which he was employed that he excited thereby great jealousy among his professional brethren, and from misrepresentations about him he was put in prison, and when let out forbid to practice until by the efficacy of his prescriptions to patients who flocked to his house, as he could not go to their residences, he convinced the public of his merits. He was then permitted to practice again wherever called, and now enjoys both a high reputation and a full purse."

Physicians he represents as being scarce—

"The greater part of Uruguay is wretchedly supplied with practitioners in medicine, and it is still worse off for those in surgery. The most illiterate quacks are the sole members of the healing art in many places, and even in the national army a want of well educated medical men exists to a great extent. According to what I could learn, it has no regular medical corps, and goes into battle destitute of even the most incompetent surgeons. A gentleman informed me he saw the stump of an arm, shot off in a battle, dressed and healed with cow-dung; and an old Gaucho present, when he told me this, stated he knew a soldier who received five lance wounds in the body, and had the whole of them cured by the application of the above sovereign remedy, kept moist by the urine of the same valuable domestic animal from which it is procured, being poured through the cloths enveloping the poultice and patient."

As the fees are high, here would seem to be an opening for some of our young graduates. Dr. Peixoto's charges for operations, according to his published schedule, are as follows:

"For trepanning he charges $100; for tying the carotid artery $500; for lithotomy $1,000; for the Cæsarean section 2,000 patacons."

The climate of Uruguay is subject to greater variations than that of Brazil. The range observed by our author was from 42°, which was in August, to 81°, which occurred in January. So dry is the atmosphere, he observes, "that twenty carcasses do not create more disgust than a single one in the United States." He adds:

"Any dead animal thrown into a place where the sun or winds can reach it, in a very short time becomes deprived of its juices, and has its skin and flesh made as dry as parchment. During the prevalence of the north and northwesterly winds the greatest drought occurs, and they are said to have blown much in 1831, '32, and '33, when no rain fell at Buenos Ayres; the pampas back of that city were stripped of vegetation, the soil was converted into dust, the sun totally obscured by clouds of it floating over the city, and deceiving the people with expectations of rain."

"The north wind at Buenos Ayres is well known to cause a peculiar headache, attended with excitement of the brain, and a disposition to rage and combat. An observance of this fact, I understand from high authority, caused Governor Rosas never to engage in fight with the Indians of the pampas while this wind blew, for he had found them always more ungovernable then, than when it was southerly."

Some other extracts we should like to make, but find that we have already taken up as much room as can be given to this work. Upon the whole, we have no hesitation in saying that we have found it entertaining. The author attempts nothing in the way of fine writing, but tells his incidents, and makes his comments in simple language. If this is sometimes incorrect, it is at all events unambitious, and it may be added, that the diary of a surgeon on board a man-of-war is not the place where we should look for finished composition. Y.

Art. IV.—*Elements of Materia Medica and Therapeutics.* By John P. Harrison, M.D., Professor of Materia Medica and Therapeutics in the Medical College of Ohio. Vol. I. Cincinnati: Desilver & Burr. 1845. 8vo. pp. 405.

The author of this work expresses, in his preface, a hope that it will be found useful in the following particulars: "1st, by an ample elucidation of topics connected with Therapeutics—such, for example, as Indications of Cure, and other kindred points. 2d, in an abridgment of the cumbrous catalogue of medicines, by the expurgation of many inferior and effete articles. And 3d, by a particular explication of the medicinal powers of our most effective means of cure." He therefore comes before the profession as a reformer. He has a hypothesis to defend, and a new arrangement of the *materia medica* to propose. The paramount object of his work, he says, is utility.

It is our intention to look somewhat critically into the

claims of this work, and to determine, if we can, how far the object of its author has been attained. This will require an examination of its doctrines, its practical teachings, and its style. If these prove to be good, there will be no longer any question as to the influence which the work is calculated to exert upon the profession, and we shall take pleasure in bearing our humble testimony to its merits. If, on the contrary, any substantial ground of objection be shown either to the style in which the work is written, or to the scope of its doctrines, this must be held to abate, so far, its claims to the favor of the profession. We are ready to welcome every valuable accession to medical literature, and all the more cordially if its auther chance to be a western man, and a neighbor, for we will not deny that we have our sectional partialities; but there can be no apology, at this day, for putting forth a work of inferior merit on Materia Medica. The numerous excellent treatises on this branch of medicine, which have been published within a few years, must be admitted to preclude any new system not coming highly recommended by its matter, its arrangement, or the style and manner of its execution. How far the work before us can lay claim to such recommendation, it is our purpose now very candidly to inquire.

At the threshold, the author gives his readers to understand that he has endeavored to place the question of the *modus operandi* of medicines on a footing 'exclusively vital'—assuming an 'apparently hostile attitude towards the very popular doctrines of humoralism.' These doctrines, he admits, 'are venerable from their antiquity, and respectable from their universality.' He adds, that 'coming down from the Coan sage, they have, with hereditary authority, been received by the profession as the most, if not only correct, explication of the mysteries connected with the agency of foreign bodies upon the system.' His inference on this point is, that—

"If true, the humoral doctrine, so universally acceptable to the people, and of such ready capability of easy application, should unhesitatingly be adopted, and transferred to the bedside. If medicines act by their introduction into the blood

then we may, and should, make a quick appeal to such a truth, not merely to help us out of our *theoretical perplexities*, but it should be made available to our methodus medendi.

"Happy would it be for mankind, and most auspicious would its bearings be on the art of healing, could we make the doctrines of the humoral pathology our 'guide, philosopher and friend.' By opening a vein and pouring in our medication upon the blood, disease would soon be rebuked. By ascertaining the morbid matters in the blood, and directly neutralizing them by injections into the current of the circulation, a direct attack would be made on the very *germinal elements* of the disease, and thus a rapid destruction of it ensue."

Still, our author does not deny that medicines find their way into the circulation. On the contrary, he allows that they 'do enter the blood, and are to be detected in the secretions.' This would appear to be a frank and unreserved surrender of the question, but not so meant the author to have it understood, for in another place we find him employing the following language:

"If medicines pass into the circulation they become endowed, like all digested substances, with the attribute of assimilation, and are no longer foreign bodies, but integral parts of the circulating fluid. As integral parts of the circulating mass, they are no longer under the laws which determined their mode of action on the body when out of the blood, but in common with the other heterogeneous constituents of that compound fluid, can exercise no controlling interference on the functions of life."

So again:

"In virtue of the power of digestion and assimilation, foreign substances are obliged to undergo a special process before they are admitted into the blood.

"In consequence of this great law of vitality, no substances alien and hurtful to the system are allowed to penetrate, and diffuse their noxious power, beyond the organs whose duty it is to watch over and guard the organism from the introduction of unassimilated materials into the circulation."

And again:

"When madder colors the bones, or nitrate of silver the skin, or rhubarb tinctures the urine, these substances having

been assimilated to the organic tissues by passing into the blood, no longer are to be regarded as medicinal agents, but as constituents of the blood."

Finally, the conclusion at which he arrives is, that while medicines, in a certain modified form, may reach the circulation, they, nevertheless, 'do not *operate on the blood*, nor do they act on the organism by direct transmission through the circulation.'

The several propositions stated in these quotations are, that no foreign matter enters the circulation; that medicines are assimilated by the digestive process before they can be absorbed, and become then 'constituents of the blood;' that the blood is not affected by medicinal agents; and that these agents never impress the system through the circulation. Unfortunately, they are all unsustained by proof. From beginning to end, they are assertions merely, and the effect of their perusal in every instance, we suspect, will be not only a smile of incredulity, but an expression of surprise, that a very sensible author should set himself gravely about the defence of a dogma so utterly exploded. The propositions are not only without proof, as we have said, but are in the face of all the evidence bearing on the subject. We need not stop to cite the evidence—it is to be found in every book relating to the question, and must be familiar to every student who has read through his first treatise on Materia Medica. He need not have gone further to be supplied with arguments sufficient to overthrow every one of these positions. To us it is strange, that any mind should cling with such tenacity to a doctrine, to which all experience and observation stand opposed. If anything in medical science is settled, it is the fact, that various foreign bodies, medicinal and poisonous, do find their way into the circulation, and, being there, do affect the living economy. *How* they affect it—by what mode of action—is another question, and one not so easily answered. Our author, in reference to this question, uses the following language, which we quote, partly because it is characteris-

tic, but also partly because it indicates an error into which he has himself fallen. He says:

"The restless and eager spirit of speculation, unsatisfied with a careful generalization of the facts treasured up by a minute scrutiny of the modus operandi of a medicine, desires to penetrate beyond the sensible phenomena, and to unveil the secret workings of nature in the case. We wish not to discourage this original tendency of the human mind for abstruse enquiry into the causes of things; but in all philosophical pursuits it is absolutely essential that we possess some restraining power over this restless desire to penetrate the mysteries of nature, lest it degenerate into a wayward mood of mind, which, spurning the sober bounds of rational investigation, sports with the gay creations of fancy as substantial and demonstrable realities."

Not content with the simple fact, that medicines are found in the secretions and in the blood—that when that fluid has degenerated from its natural state, and has become deficient in red globules, iron restores it to a healthy condition—he has 'spurned the sober bounds of rational investigation, and sports with the gay creations of fancy'—the fancy, that iodine, oxalic acid, chlorine, nitrate of silver, and arsenic, when they are taken into the system cease to be foreign matters, and become '*constituents of the blood!*' It is, indeed, pure fancy. No fact or analogy in nature lends countenance to it. Not only are the substances not assimilated, but they continue to exert their peculiar influence after they have gained admission into the circulation. Whether they do this by their action upon the brain or other vital organs, or by affecting the nerves of the veins in which they circulate, or by some other explicable or inexplicable mode, is a question upon which the minds of physiologists are still unsettled. This may be one of those 'secret workings of nature,' which it is not permitted us ever to 'unveil.' But let us not deny what our senses teach us, because we cannot comprehend what goes on in the animal economy beyond the reach of our vision. Let us not deceive ourselves and others by terms which have no meaning, nor fancy that we have explained any process when

we have put it upon a footing '*exclusively vital.*' Above all, let us be cautious, in works intended for beginners, as in all cases where we are liable to lead others astray, not to assume that as science which has no foundation but conjecture, and which all our knowledge contradicts.

This labored effort of our author to revive an obselete idea, must be regarded by his readers, with now and then a rare exception, as a waste of time, and a sad misapplication of ingenuity. It occupies more than thirty pages of the volume, and makes one of the least gracious introductions to it that could well be imagined. In future editions we shall be glad on the author's own account, not less than for the sake of true science, if we shall find that it has been suppressed. 'Speculative views on the modus operandi of remedies,' he says, in his own peculiar way, 'are apt to *merge* into the *illimitable*, and become too refined and attenuated for practical purposes;' and most surely is the remark true of his speculations, on which account we are not sorry to take leave of them, and proceed to other portions of the work where we shall find more to approve.

The classification of remedies has always been a troublesome point with writers on Materia Medica. Under the four heads of '*evacuants*, *excitants*, *secretants*, and *narcotics*,' Professor Harrison thinks all remedial agents might be arranged. But he prefers, to quote his own words, 'a collocation rather more extended, and which more completely quadrates with our six governing therapeutical indications.' Consequently, to the list just given, he adds two other classes—'*alterants* and *derivatives*, or revulsives.' We agree with him, that 'simplicity is a very desirable characteristic in all scientific matters,' and shall not find fault with his classification on that ground. No doubt it will be criticised, for nearly every writer has his favorite arrangement. We have none, and that of Professor H. strikes us as combining as many advantages as most of the others.

On another point we have more difficulty. Our author says;

"The hand of judicious reform should expurgate the cumbrous list found in our works on Materia Medica."

Then, referring to the multitude of medicinal agents enumerated by Pereira, Dunglison, Eberle, Thompson, and others, he goes on in the following strain, which will be likely to recall to the reader's mind the remarks of the author about the desirableness of 'simplicity in scientific matters:'

"Is it not very apparent that such redundancy is both unscientific and injurious? Derogating from that simplicity and directness which should ever characterize all our researches into the sanative efficiency of the articles employed in the practice of medicine, and by its encumbering weight impeding the march of enlightened therapeutics."

All this may be very true; but what hand is to be trusted with the pruning-knife? Who is to decide how far the work of reform shall be carried, what articles shall be lopped off, and what left? A favorite medicine of one author might be thrown out as inert by another. Professor H. would proscribe one agent as useless, and, in turn, might find a valued remedy consigned by Thompson or Dunglison 'to the tomb of all the Capulets.' We cannot foresee where this would end, and, therefore, while we agree that in elementary works it may be profitable to abridge the list of medicinal substances, we incline to the retention of the entire list in the larger systems.

We have said that we are not inclined to make objections to the classification of our author, but, at the same time, we are not prepared to unite with him in his condemnation of other systems; as thus—

"What a sad *dereliction* from that precise and perspicuous collocation, or distribution, which should obtain, is exhibited in those tables of classification, where remedies are arranged under the respective heads of vital agents, chemical agents, and mechanical agents."

Or as in the following sentence, referring to the same:

"All this appears to our mind very much like the old scholastic subtlety—a curious piece of mosaic refinement, entirely at variance with that *axiom already announced*, that all medicines act upon the powers of life, and not in virtue of any chemical law."

The *axiom* already announced? An axiom is an established principle in science or art—a self-evident truth. And is it indeed so fully settled, that no medicines act 'in virtue of any chemical law?' Is it an established principle, that antacids and anti-lithics have no such action? Is it perfectly clear at first sight—so evident that no process of reasoning can make it plainer—that iron in cases of anæmia has nothing chemical in its action, that the influence of anthelmintics is purely vital, and that baths, pustulants, and cauterizing agents involve no chemistry in their operation? If so, it is strange that writers on this subject have not been able to see it, or, to speak more correctly, have so universally continued to deny it. That is a queer sort of an '*axiom*,' it must be confessed, which nearly every body agrees in rejecting.

The chapter on "*the circumstances which modify our therapeutical indications*," contains many just remarks, and evinces study and observation. We do not, however, perceive any particular force in the objections of the author to the theory of specifics, upon which, he says, 'the older writers dwell with fond and pertinacious speculation.' No one, we presume, believes in this 'supposititious *specifica qualitativa* of medicinal agents,' to give his own words again, a remedy which, under all circumstances, 'will so act on the pathological entity, or germinal matter of the disease' as to restore health. In this sense there is no specific in medicine, nor in anything else. Our remedies, all things being the same, always produce the same effect; and that is as much as can be affirmed of the operation of any agent in chemistry or physics. Quinine, mercury, and vaccinia are as truly entitled to the term specific, as are alcohol and nitric acid. Quinine

generally arrests chills; mercury cures syphilis; and vaccination prevents small-pox. It would, no doubt, be correct to say that they will always do so under the same circumstances. But they occasionally fail to produce these effects. And the same may be said of alcohol and nitric acid. Alcohol, among many remarkable properties, has the effect of hardening the brain, and for that purpose is employed by the anatomist; but now and then it fails. When the brain has suffered what is called, technically, *ramollissement*, it is found that alcohol does not harden it. So of nitric acid: under favorable circumstances—always, when there is nothing to oppose the union—it may be made to unite with soda and form a salt. But, here as in the other cases, to insure the result we must have certain conditions. If the soda be combined with sulphuric acid, nitric acid will not combine with it. We repeat, therefore, that the argument of our author against specifics does not appear to us to possess any special validity. The only difference that we can see between him and others is as to the meaning of the term. As he defines it, there is no specific; but as commonly understood, most medicines may be said to have something specific in their action.

Since, then, we are unable to perceive any marked peculiarity in the views of our author on this point, we are not prepared to concede to him the superiority of position, which he seems to claim in the following remarkable sentence:

"In the fulfilment of our six indications of treatment, already discussed, we can, in pursuance of a just scientific methodus medendi, prosecute plans of therapeutic procedure, susceptible of those variations required by the endless mutabilities of disease, whilst at the same time we decline reliance upon dubious and intangible speculations to guide our course."

As we have quoted one sentence, the peculiarities of which can hardly fail to strike the reader, we are tempted to quote a few others, of kindred character, which we find in the discussion of a subject closely allied to the last. The author is

treating of the *indications of cure*, when he breaks out in the following strain:

"Then why, with fond and *illusive earnestness*, *speculate* about the *suppositious*, *inherent*, *independent vital endowment of the blood?* Why, with a *fervid fancy*, *heat our minds* in *the chase of a nonentity?*

"How far can the humoral pathology assist us, in the detection of the true indications of cure in disease. Does this antique, venerable and much venerated system of pathology, throw no light on the true therapeutical indications by which scientific medicine is to be governed at the bed-side? Here is the field on which this time-hallowed and hoary-headed theory, or rather hypothesis, should achieve its most signal triumphs. But alas for its advocates! It deserts them at the bed-side; and at the very moment when its illustrations and enforcement are most anxiously anticipated, like the fabled hero of the Æneid, it escapes in a cloud from the scene of action, and leaves its votary to seek for other aids and better lights to guide him."

We would simply remark, concerning the doctrine of these passages, that there is a wide difference of opinion between Professor Harrison and Professor Andral on this subject, and that the weight of testimony compels us to take sides against our countryman. Prof. H. asserts that—

"There is not a single indication of cure, that we can build on these supposed morbid states of the blood."

Professor Andral, on the other hand, insists that much may be inferred from the appearances of the blood in disease, and adduces so much evidence in favor of that opinion, as was shown in a former number, that most readers, we suspect, will be strongly disposed to give it some credit.

Occasionally, our author manifests a disposition to take leave of these 'dubious and intangible speculations,' which, he owns, 'are apt to merge into the illimitable,' and to confine himself to the more obvious effects of medicines, as having 'stronger claims on our attention than the more fascinating employment of indulging in theoretical explanations of the occult modes

of their action.' But he does not continue long in this vein. The strong propensity returns, and hardly has he confessed the fruitlessness of such inquiries, before we find him busy again 'explaining the inexplicable.' The ultimate action of remedies, at one moment, appears to him 'occult'—concealed by an impenetrable veil; but the next he is ready to pronounce positively upon its character, as if he had been admitted behind the curtains and understood all:

"Medicines operate in virtue of a dynamic, and not from any chemical or mechanical mode of action."

And so, again, of the manner in which certain agents operate upon the blood, and restore it to a healthy condition:

"If the blood is thus purified," (by diet and mercurials) "it is *consecutive* upon a prior *rectification* of *disordered function* in the *life of nutrition.*"

The following are much in the same style, and if they fail to convey any clear idea to the mind, it cannot be attributed to any lack of words:

"Primordially, the action of an alterant is upon the vital properties of the system, in virtue of the relation which exists between the state of those vital properties, and the article administered."

"From deductions, drawn from a wide field of experience in the profession, we are warranted in referring the *peculiar* power of alterant medicines to a *special medication* which they *create.*"

"Incidental, or consequential, to the power possessed by alterants in so modifying the morbid conditions of the organs, as to subvert anormal processes going on in them, there are various evidences of a more energetic and harmonious movement established in the vital endowment of the organic structures. These evidences of a renewal of the healthy state of the parts originally diseased, or of the sympathizing portions of the frame, should be placed among the collateral and resulting phenomena, which accompany, or spring from, the primary alterant action."

The author gives sound advice to young physicians in his chapter on *the theory and art of prescribing*. In the West, especially, he is persuaded, we are prone to attempt too much by our 'heroic remedies,' and in that view, 'most importunately does he solicit the young physician to beware of an intemperate and reckless earnestness in the prosecution of his schemes of cure.' He continues, in his own peculiar way:

"Polypharmacy is bad enough; so is imprecision in the giving of medicines; but a too zealous and eager spirit of dosing, of multiplying dose upon dose, even when done with a precise, accurate, and clear view of the diagnosis, *may inflict more irreparable amount of mischief* upon the *patient's welfare*, than can be compensated for by the *adroitness* and *fine tactics* by which formulæ may be constructed."

On this point, and on all practical subjects, the views of our author strike us as, in the main, sound and judicious, and our impression of the volume before us is, that it gives advice which the young practitioner may safely follow at the bed side. However the mind of the author may be warped by certain theoretical notions, when he comes to speak of the application of remedies to disease, he seems to be free from unwise prepossessions, and ready to adopt whatever experience may have sanctioned in all the systems. The practice he recommends is what would be styled energetic, or bold, rather than expectant. There are points in it to which we might object; but as a whole, we have no doubt, it will be approved by those who have had most experience in the management of our diseases.

After all, is not that the principal matter? The great aim of a book on Therapeutics, is the establishment of a safe and successful plan of practice, and that being attained, we may pass the speculative opinions of the author by, as of secondary importance. Still these have their consequence, and must be taken into account in the general estimate of the work. So, also, must be the style in which the matter is conveyed. The volume before us if tried by the first of these tests will

pass well; but if subjected to the latter, our conviction is, that an unfavorable sentence must be passed upon it.

Of the cardinal doctrine of the work, which pervades every portion of it, and appears to hold the mind of the author as by a sort of fascination, it is sufficient to say, that it is obsolete. No galvanizing process can ever excite it to more than a few mimic movements, which no one is in any danger of mistaking for those of life. It is in its grave, 'with forty mortal murders on its head,' and there, 'after life's fitful fever,' it should be allowed to rest.

We shall not attempt to characterize the style of our author. Wherever, in this article, we could do so, we have communicated his views in his own language, and have thus placed before the reader the materials for forming an opinion touching this point. Such specimens might be multiplied to almost any extent, for they are afforded by every page, and nearly every paragraph of the book. Nothing seems so much to the author's taste as what he would style *verba sesquipedalia.* Simplicity and brevity of expression he studiously shuns, as something beneath the dignity of a scholar. He delights in stringing together the longest words, and in piling epithet upon epithet, until his sentences might be said to *groan under them.* Thus in his lively description of the follies of Homœopathy he says:

"Proceeding according to his plan of exiguity, or attenuation, and impregnating each reduction with fresh medical virtues by his rubbing or shaking, one grain of physic will finally answer to dose every man, woman, and child on the face of the earth, all their lives, till, in the ordinary course of mortality, they are all carried to the grave."

It was not enough to say that it would dose them '*all their lives,*' but he must add—'*till,* in the ordinary course of mortality, *they are all carried to the grave.*' Instead of vital, he has the action of medicines to be 'dynamic;' and for a table of doses, he has a 'posological table.' His sedentary persons 'bear with less tolerance,' and his pupils are to engage in

'clinical perquisition,' and be on their guard against 'speculative plausibilities' which 'merge into the illimitable.'

Such sentences as the following are not unfair specimens of the manner in which the author delights to impart instruction:

"Modification of action is induced by medicinal combination, in the creation of a new therapeutic result."

"Can we imagine that this infinitesimal dose will operate any change on each molecule of the blood; or that the visions of homœopathic power will be realized in each texture of the body?"

"Calomel given alone is a remedy of great capability of remedial power, but the chief curative results which arise upon the exhibition of this effective weapon of medical aggression, are seen subsequent to a combination of the article with antimony, or opium, or a union of all three."

"Where ætal and scrofulous predispositions are conjoined with this engrafted, or superadded disturbance of the chylopoietic viscera, there is frequently engendered incurable lesions of secretion, or structure, in the encephalon or thorax."

'Organs giving egress to the peculiar fluids of their secretory elimination,' 'emunctorial outlets,' 'the parturient uterus stimulated to intense expulsive contractions,' 'transmitted pravity of constitution,' 'beyond the warrantable bounds of a sound induction,' 'cutaneous phlogosis,' 'a better hæmatosis, 'modifications imparted to the molecular movements of the blood in the terminal branches of the vascular system:'—these and numberless similar expressions occur continually in the work. We suppose that in quoting them, after the numerous extracts already given, we afford the reader the fairest means of judging of the merits of its style. They will probably start in his mind, as, we confess, they often suggested to ours, the question, whether 'the hand of judicious reform' would not come in well here, to 'expurgate the cumbrous list.' We must say, that of the two—redundancy of things, though they be obscure medicines, and redundancy of words, though

of most 'learned length and thundering sound,'—we should be obliged to declare for the former. We are not able to perceive how the pupil is to gain by exchanging matter for phrases—by giving up remedial agents and getting sound in their stead. If the list of remedies is to be retrenched, he is not unreasonable in asking that the language in which they are described be also confined within reasonable bounds. Poverty of matter and exuberance of style might reasonably be expected to provoke his complaints. Y.

Art. V.—*An Essay on Curvatures and Diseases of the Spine, including all the forms of Spinal Distortion:* to which the Fothergillian gold medal was awarded by the Medical Society of London. By R. W. Bampfield, Esq., one of the Surgeons to the Royal Metropolitan Infirmary for the Diseases of Children; Fellow of the Medical Society of London; Author of an Essay on Hemeralopia, or Night Blindness, of Practical Treatises on Tropical and Scorbutic Dysentery, &c. Edited by J. K. Mitchell, M. D., Professor of the Practice of Medicine in Jefferson Medical College of Philadelphia, &c., &c. Philadelphia: Ed. Barrington & Geo. D. Haswell. 1845. 12mo. pp. 223.

This volume makes the number of the *Select Medical Library* for October, and forms a seasonable contribution to our medical literature. The profession in the west is much in need of a work devoted to this specialty. Diseases of the spine are of not infrequent occurrence amongst us, and as the habits of our people become more luxurious they are likely to increase. It is therefore a matter of great importance that physicians should have their attention directed to the subject, and should be familiar with the earliest indications of the disease, in order that they may be able to meet it at its commencement, when, alone, it is treated with any certainty of success. Much suffering, and much hopeless deformity might be prevented if parents and practitioners were suffi-

ciently on their guard against the first encroachments of these terrible maladies. "Whenever," is the just remark of the editor in his brief preface, "a child complains of unwonted lassitude, of tenderness in the back, or of constant pain in the side when seated, or drags its legs awkwardly, or begins to trip and fall in an inexplicable manner; or still more, when the dressmaker finds it difficult to obtain a 'neat fit,' or the shoulder-blade projects, or the line of the shoulders is inclined, we should examine well the spine, both as to sensibility and shape."

Excurvation of the spine is the disease first spoken of, and is considered by Mr. Bampfield the most frequent of all the distortions. Dr. Mitchell agrees that it is so in boys, who are seldom affected with any other form, but he maintains that the lateral curvature is much more frequent in girls. The treatment of it resolves itself into two classes — prevention and cure. The first consists in placing the patient in the recumbent posture, which is to be done at the earliest period.

"Generally speaking, in all cases of incipient curvature, the recumbent posture should be much adopted, with such a degree of exercise of the dorsal muscles as each particular case will admit of; but if inflammation be present, exercise may be injurious; if rheumatism exist, it cannot be employed, and if the remote cause be sprain, contusion, &c., the pain from attempting exercise will prevent its use."

"Some of the indications in the treatment of curvature of the spine are general, and will apply to its several varieties, whilst others will be particular, and peculiarly adapted to one variety only. The general indications applicable to all, are, to afford to the vertebral column effectual relief from pressure; to secure the bodies of the affected vertebræ from the irritation of motion in the erect attitude; to assist or enable the vertebral column to regain its true spinal line; to remove all constitutional and local symptoms of disease, and rectify all disordered functions, to promote the general health."

"The first indication will be fulfilled by relieving and protecting the spine from *all* superincumbent or other weight."

"The means adopted for the purpose of taking off all pressure from the spinal pyramid, have been to confine the body in the recumbent posture, either on an horizontal or an in-

clined plane; and it should be determined, on due consideration, if one of these contrivances be preferable to the other, or if either of them be objectionable."

"The second indication will be fulfilled by rest in the horizontal posture, and by abstaining from all movements and positions whilst so *lying*, which throw weight on the bodies of the vertebræ. This seems necessary, because movements of the body in the erect attitude would, sometimes, produce a degree of friction and motion of the diseased vertebræ that would be injurious; because they would tend to excite inflammation and absorption; and because analogy points it out, as absolute rest is enjoined in almost all diseases of other joints."

Incurvation of the spine is less frequent than the foregoing species. It is rarely attended, moreover, with the serious consequences that ensue from the other curvatures, and takes place generally, if not always, when the result of disease, in the cervical, lumbar, or lower dorsal vertebræ. The lumbar incurvation is generally removable at will; the cervical is permanent. The treatment, as in the preceding, consists mainly in directing the horizontal position. If the incurvation be of the cervical vertebræ, "the chin should be drawn in towards the neck; if of the loins, the flexion of the thighs tends to remove it." But this flexion cannot be constantly employed, because it would bring about permanent contraction in the flexor muscles of the thighs.

"Proper position will also contribute to the recovery, by taking off the superincumbent weight and pressure of the head, and by assisting in keeping the cervical vertebræ extended. For these purposes, the patient should have his head fixed in a socket let into the plane in which he lies, with his chin bent on the chest, and extension of the cervical vertebræ should be resorted to, immediately before the occiput is placed in the socket; the plane should also have a slight angle of inclination at first, that may be afterwards increased; for, the head being fixed, its weight does not press on the vertebræ, even when the patient lies on an inclined plane. Friction and shampooing should be employed. Leeches and blisters may be prescribed, if any pain or inflammation arise. Appropriate remedies should be adapted to the different constitutional disorders that may accompany incurvation, similar to what have

been recommended in excurvation. Tonics are, in general, indicated.

"In the cases of spinal curvature in which the dorsal horizontal position is adopted, the patient should lie on an unyielding mattress, for, if placed on a yielding medium, the column would curve backwards beyond its true spinal line. To this rule there are some exceptions."

"*Lateral Curvature.* — This disease almost universally occurs *during the growth of the body*, and is almost as common as excurvation. It rarely occurs in infancy or after the adult age."

"The remote causes of lateral curvature are rachitis, or disproportion of growth of the sides of the vertebræ; unequal length of the lower extremities; undue pressure on one side of the vertebral column from carrying heavy weights on one arm, by which the spine is bent to one side; an inclined position of the body to one side long continued; muscular debility; rheumatism of the intercostal and dorsal muscles; abscess on the side of the neck or trunk; scrofula; tumors."

"In the very early stages of this disease, when the curvature is directly lateral, and there is no pain or tortuosity of the spine, a cure may be attempted, without having recourse to the recumbent posture, by proper exercises of the dorsal muscles and those of the trunk; by wearing the spine machine or collar, with lateral and axillary supports, and the rods for supporting the head, as often as the patient uses the erect attitude, and by the remedies employed for the cure of rachitis. This instrument shall be worn in all cases, whenever the patient is obliged to assume the upright posture, and if a cure cannot be effected, this instrument, varied for particular purposes, must be worn. If instruments be injurious at all, they must be so in curvatures attended with rachitis, when the bones are soft and yielding. I, therefore, revert to the subject of the use of instruments. As all the spine instruments embrace and rest upon the pelvis, as their basis of support, they have been objected to by many eminent surgeons, whilst their employment has been defended by others, and great authorities may be quoted on both sids of the question.* The bad effects are attributed to a weight or burthen being thrown on parts never intended or calculated to bear them, by which the

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* No such objection applies to the spine-car of the editor, and the spine-chairs of Darwin, Shaw, and Kissam, as they do not throw the weight on the pelvis.—*Editor.*

pelvis is irreparably distorted, and females suffer, during parturition, from pelvic deformity, preventing or retarding the passage of the fœtus."

"*Angular Projection of the Spine.*—This species almost always invades the lower portion of the spinal column, and the principal seat of the malady and projection is in the lumbar vertebræ, the spinous process of the third or fourth of which generally forms the prominent angular point. I have, however, seen this form in the centre of the dorsal vertebræ. The reason why this distortion assumes the angular, instead of the curved figure, seems to be, because the lumbar vertebræ below are naturally incapable of so much flexion or of being bowed out so much as the upper vertebræ, or they offer an effectual resistance to it, from being so near a fixed point as the sacrum; hence, the vertebræ below the one disordered or deranged nearly retain their spinal line, whilst those above are removed from it.

"Since my attention has been particularly directed to this species of spinal distortion, it has occurred in my practice as frequently as excurvations or lateral curvatures.

"This distortion generally occurs in young persons from three years of age to twelve; but adults are sometimes obnoxious to it."

"*Causes of Angular Projection.*—The remote causes of this species of spinal distortion are contusions of the spine; sprains of the lumbar vertebral joints; muscular debility; pressure of the cyst of lumbar abscess; a rickety growth or malformation of the bony bridge; and, more frequently than any other, scrofulous or common inflammation of the intervertebral cartilage, and horizontal surfaces of the vertebral bodies.

"The immediate causes, being the same as of other spinal distortions, must be sought for in a structural disproportion between the anterior and posterior portions of the vertebræ or intervertebral cartilages, or in the destruction of the horizontal surfaces of one or more vertebræ, and the intervertebral cartilages situated between them."

"*Treatment.*—Many of the indications of cure enumerated for the treatment of excurvation of the spine, are, with equal propriety, applicable to the angular projection, and the mode of treatment they inculcate will be found as serviceable."

"Reposing in the facial horizontal position on a soft feather bed, will be found particularly advantageous in this variety, for, as in all the cases I have seen, except one, which involved the central dorsal vertebræ, the most projecting spinous processes were those of the lumbar or lowest dorsal vertebræ,

which consequently form the seat of distortion or disease; and as, in this position, this part of the spine gravitates and inclines inwards more than in any other, so as to form even in health an artificial incurvation, by which the anterior portions of the spine are separated and the posterior more closely applied, it is easy to infer, that all weight and pressure are taken off the anterior portions of the column, by which the progressive absorption is suspended and further prevented, and that some weight of the column, by the incurvation, is transferred to the posterior portion, where it occasions such a degree of pressure, as may arrest the disproportionate growth of bone, or if not, it may conduce to its accommodation, by the tendency of its pressure to promote absorption of the parts of the vertebra above and below it, by which space will be formed to accommodate the disproportioned and enlarged vertebra, and the balance of the spinal line preserved."

This work is eminently satisfactory on all the points upon which it treats. The reader who applies to it for information concerning maladies of the spine will not be disappointed. In a small compass it embraces a large amount of practical information of which the physician must often experience the need. The republication of it in its present cheap form has placed it within the reach of every one. Dr. Mitchell's additions to it are not numerous, but in every case his notes contain valuable facts or suggestions. Y.

Art. VI.—*A Synopsis of the Symptoms, Diagnosis, and Treatment of the more common and important Diseases of the Skin.* With sixty colored figures. By N. Worcester, M.D., Professor of Physical Diagnosis and Pathology in the Medical School of Cleveland, late Professor in the Medical College of Ohio. Philadelphia: Thomas Cowperthwait & Co. Boston, Charles C. Little and James Brown. Cincinnati, Desilver & Burr. 1845. pp. 292. 8vo.

We must agree with Dr. Worcester that a compendium of the kind here presented to us has long been needed. We are disposed also to admit the truth of what he says concerning the little attention that cutaneous diseases have received at the hands of the general practitioner. They seem to have been shunned both by physician and surgeon, and to have

been delivered over, by general consent, to quacks, and to old women, whether in petticoats or cut-a-way coats. These last have found their peculiar home in this department. Here they have revelled, rioted, luxuriated; here they have reaped their greatest harvest. Hence the legion of popular nostrums whose virtues we hear vaunted, from *Judkin's Patent Specific* up to that of — we forget the name—with Duff Green's recommendation. Every old granny, whether male or female, has her "nice sa've," her "'intment," not forgetting the "persipity," white and red; and her *teas* from "sassyfrac," or "pennyr'yal," down to "sheep-saffron," to purify the blood. We have not the difficulty our author has in accounting for this. None deny the importance of these diseases, their frequent occurrence, and the facility of examining them. It may be, too, that they are susceptible of a "simple, beautiful, and perfect classification;" but, nevertheless, it is the absence of this, we apprehend, that constitutes one of the causes of their neglect. Students have stopped, appalled by the inextricable confusion of tongues that greeted them at the threshold, and perplexed by the multiplied and excessive refinements that met them at the outset. The desire of presenting something new, has been attended with as unfortunate results here as elsewhere. Authors seem to have puzzled their brains, and certainly they have perplexed those of others, in their hair-splitting distinctions and divisions. Alibert's tree is but a type of them. One of the latest works on the subject makes no less than nine varieties of erysipelas! Names are so accumulated, so piled and heaped on each other, so *imbricate*, to use a botanical phrase, as to form a covering as impenetrable as the bull's-hide shield of the Roman soldier, or the seven-fold one of Ajax. Is it any wonder that these diseases have been neglected? that a physician in laborious practice has turned from them almost in disgust? Another reason, perhaps, for this neglect, is the expensive nature of most of the special treatises—they are not within the reach of the general practitioner. And a third reason is the inadequacy of mere description, however accurate, to fix their characters in the mind, and the difficulties of seeing examples in a sparse country practice.

Dr. Worcester does not pretend to any originality in his synopsis, but candidly tells us that he has drawn his materials from every source that he found available. In the classification of cutaneous diseases he has followed Willan, not because the system of the latter is without strong objections, but because, notwithstanding its defects, it is the "most simple," and "affords greater facilities for detecting and classifying a disease." Willan's arrangement seems to bear about the same relation to that of other authors that Linnæus's artificial system of botany does to that of more recent writers on the same subject—less scientific, or philosophical, but absolutely indispensable to the student or young beginner. It has been called, in fact, a work on natural history rather than pathology. The new orders that have been added to the system by more recent writers, consisting, for the most part, of a single disease, and this of rare occurrence, have been omitted by our author, as not coming within the scope of a work designed as a manual of the more common diseases only. He has also omitted the eruptive fevers, as a minute account of them is contained in most of the treatises on medicine. To facilitate diagnosis, Dr. W. divides the orders into two groups, the *moist* and the *dry*. In the first group we have three orders, in the second five. Thus:

First Group.		*Second Group.*	
Vesiculæ.	Eczema.	Exanthemata.	Erythema.
	Herpes.		Roseola.
	Scabies.		Urticaria.
	Miliaria.	Papulæ.	Lichen.
Bullæ.	Pemphigus.		Prurigo.
	Rupia.	Squamæ.	Lepra.
Pustulæ.	Ecthyma.		Psoriasis.
	Impetigo.		Pityriasis.
	Acne.		Ichthyosis.
	Mentagra.	Tuberculæ.	Elephantiasis.
			Molluscum.
			Frambesia.
		Maculæ.	Ephelis.
			Nævi.
			Albinismus.
			Vitiligo.

He gives the following simple rules in making a diagnosis:

"1st. Ascertain whether the eruption was originally dry or moist

"2d. Examine with great care the eruption, and in a great majority of cases some examples of the elementary form of the eruption, as the papule, vesicle, or pustule, may be found either in the neighborhood of the part principally affected, or in some more recent eruptions. Almost all cutaneous diseases are successive in their appearance, which is often of great assistance in the diagnosis.

"3d. Where you cannot satisfy yourself by a careful examination, as to the elementary form of the eruption, after having ascertained the group to which it belongs, try to learn from the patient or friends the appearance of the disease at first, as whether the vesicles were from the very first filled with a clear, limpid, or with an opake and yellow fluid; whether the pimples were at first distinct, small, hard, and conical, or were flattened, soft, conglomerated, &c. &c.

"In most cases by observing these three general rules, not only the group, but the order to which the disease in question belongs, can be ascertained; beyond this the differential diagnosis of the different diseases belonging to the same order, is commonly not difficult and often of no great practical importance."

The prognosis is not unfavorable if these diseases are treated in the early stage. It is only when they are allowed to continue until the delicate structure in which they are seated is disorganized, that they become inveterate.

In relation to the causes of cutaneous affections, our author presents nothing new. Some are hereditary, some contagious, some are excited or kept up by certain articles of food, but in many instances no satisfactory cause can be ascertained. Dr. W. thinks the most prolific source in this country is want of cleanliness; the same cause was assigned by Willan for their frequency in England.

On the subject of treatment Dr. W. insists that if the true pathology is kept steadily in view, and remedies are applied according to the character and stage of the disease, the result will be as satisfactory as in the diseases of other organs.

"The great reason that the treatment of cutaneous diseases has generally been attended with so little success, is that we prescribe for them too empirically, and do not pay sufficient attention either to the pathology or to the stage of the eruption. The same general principles should govern us here, as in the treatment of all other diseases; a great proportion of cutaneous eruptions are at first inflammatory; in this stage, common sense would direct general depletion by blood-letting and cathartics, and local soothing applications, as cataplasms, water-dressings, &c., to allay the local excitement; in short, a strict, antiphlogistic course, both in medicine and regimen, should be directed. When the acute stage has passed by, the course should then be changed, and in some cases the treatment can now be beneficially reversed, and tonics or even stimulants, both general and local, be substituted for depletion."

Many of these affections are maintained by improper treatment long after they would otherwise have ceased. The practitioner should also bear in mind the vicarious office of some of them both in the adult and the child; and should be cautious how he interferes with them before attending to the general health. Cleanliness is of vast importance, especially in diseases belonging to our author's first group; nothing else being requisite for the cure of many of them. Attention to diet is also of great importance. Scanty and innutritious food is known to excite cutaneous diseases; hence among the poor and destitute of large cities, a generous diet is about all that is required. "A mild, unstimulating, abstemious diet in the acute stage, followed by a more generous allowance, as the activity of the symptoms abate, is found to be the general rule in the treatment of all these diseases." Certain articles of food have, from time immemorial, been set down among the exciting causes of cutaneous eruptions. The Jewish prejudice to pork seems to be well founded. Salted meats, articles of a fatty or oily nature, heating condiments and spices, and alcoholic drinks, are to be avoided.

Among the general remedies, the lancet and purgatives are peculiarly useful in the active stage of most eruptions; next to these come tonics, especially the bitter infusions and min-

eral acids. Advantage is frequently found in giving the saline cathartics in bitter infusion, or with a few drops of one of the mineral acids. The great remedy at the present day is arsenic, in the form of Fowler's or Pearson's solution, the Asiatic pill, or combined with iodine and mercury as in the triple compound recently introduced under the name of Donovan's solution. Cantharides in the form of tincture, and corrosive sublimate, are valuable in the same cases and stages as arsenic, with which they are frequently alternated. Sulphur in substance, or combined, as in some of the mineral waters, is another remedy of considerable efficacy. The dose should not be large, and it should never act as a cathartic. Two new remedies have lately been introduced, the anthrakokali and fuligokáli. Our author gives the formulæ for their preparation, but does not seem to place much confidence in them. Of local remedies, leeching and sedatives are most important in the active stage of eruptions; in the chronic stages, stimulating applications are required. Among the soothing remedies, the author, as might be inferred from what we have already stated, places foremost some variety of the general or local warm bath. Of the stimulating applications, none are so generally useful as some of the sulphur baths. They are a favorite remedy with Alibert, and at the Hospital of St. Louis, in Paris. They are found most useful in the same cases as arsenic, that is to say, where the eruption has become squamous.

Such, in a general way, are the principles which, according to our author, should guide the practitioner in the treatment of cutaneous affections, and such are some of the means of treatment. We cannot, of course, follow him in his description of the various orders and genera of diseases. These descriptions are concise, but accurate; while, under the several heads of *diagnosis*, *prognosis*, *causes*, *and treatment*, will be found all that, in the present state of the science, is known of each particular disease.

The mechanical execution of the work must not pass unnoticed. Judgment and taste have been evinced in selecting a

large, clear type, with a page not too much crowded—two things which, in our opinion, are no mean recommendation. Among the colored figures, which are absolutely indispensable in a work of this kind, will be found an illustration of nearly every disease mentioned in the text. These are executed in a style creditable to Western art, and are, so far as we can determine, faithful to nature.

In regard to the literary merits of the volume, we might, with good reason, take the author severely to task on account of numerous ill-constructed sentences, and a frequent looseness and carelessness of phraseology. But he is young as an author, and we are disposed to let these pass without comment. We are not sure, however, that the publishers do not deserve a rap over the knuckles for the many, and, in some cases, monstrous errors of the press. These are so many blemishes on the work, which might have been and should have been guarded against. C.

SELECTIONS

FROM

AMERICAN AND FOREIGN JOURNALS.

Report of the Trial of Abner Rogers, Jr., indicted for the murder of Charles Lincoln, Jr., late Warden of the Massachusetts State Prison; before the Supreme Judicial Court of Massachusetts; holden at Boston, on Tuesday, January 30, 1844. By GEORGE TYLER BIGELOW, and GEORGE BEMIS, Esqs., Counsel for the defendant.

The case of Rogers, is one of much interest to the medical and legal profession, from its bearing on the subject of the medical jurisprudence of insanity; and it is hoped that the following synopsis of the facts may prove useful, by directing attention to this important subject.

Present—Chief Justice Shaw, Judge Wilde and Judge Dewey.

Samuel D. Parker, Esq., the Attorney General, produced and read the conviction and sentence of Abner Rogers, Jr., as a 'second comer,' in the State prison; by which it appeared that Rogers was convicted and sentenced in March, 1833, for having counterfeit money in his possession, with intent, &c., to two years hard labor in the State prison; and again in 1838, for burglary and theft, to five years imprisonment. As a 'second comer,' under these two sentences, was again sentenced at the Municipal Court for the city of Boston, at the March Term, 1843, to six months additional confinement in the State prison, which last sentence he was undergoing at the time of the homicide.

On Thursday, the 15th of June, in the afternoon, Mr. Lincoln, the warden, came into the shoe-shop of the prison, where Rogers was employed, in company with a stranger.

Immediately after his entrance, and while engaged in conversation with one of the prisoners, Rogers passed across the room, took a knife from another bench, with which he approached the warden, and inflicted three wounds in quick succession; one in the small of the back, one in the back under the shoulder-blade, and another in the neck.

Without uttering a word, the warden fell into the arms of a bystander, and expired.

By the testimony of Dr. William J. Walker, physician to the prison, who made post-mortem examination of the body, it appeared that the wound in the small of the back was slight; that the wounds under the shoulder-blade and in the neck, were very severe; the latter dividing the carotid artery, and injuring the windpipe.

The indictment charged the prisoner with the crime of murder, and the Attorney General stated, that in regard to the various particulars alleged, he was prepared with the testimony to establish his guilt; but as the act of killing, and the manner of its accomplishment, was admitted by prisoner's counsel, the testimony relating to these points is omitted in this account.

The Attorney General further stated to the jury, that the case depended upon their decision of the single question—

Was Abner Rogers, Jr., an accountable moral agent at the time of the homicide?

To establish this point, Dr. Walker was recalled, and stated that he had known the prisoner for a number of years, and that he saw him on the morning of the homicide, when he came to the hospital for examination.

All applicants for medical treatment come to the hospital, together, to see the physician. Rogers was among the number on the 15th of June. He walked steadily to his seat in a quiet manner. When his turn came, he passed the door of my room in the same quiet manner toward me. I asked him what was the matter? He threw himself into gesticulations at once, put his hand up to the side of his head, and said—'I am in great distress here, I am in pain all over, and feel as if I could not govern my mind.' I said to him, I understand this. If you will do your part toward meriting kind treatment, you will receive it; but if you do not, you cannot receive it. He became collected immediately, was attentive to my advice, and went quietly away. After seeing me, he was sent back to the shop. My prescription, as written in the book for him, was, 'keep at work.'

Between the 1st of February, 1843, and the day of the homicide, the prisoner had presented himself at the hospital as an applicant for medical treatment, twelve times; but on two occasions only, had he received any medicine. At one time liquorice was prescribed, and at the other, two bread pills. I am satisfied that he was of perfectly sound mind on the 15th of June, and that he came to deceive me.

Dr. Walker further stated, that he never had any conversation with the prisoner, except when he came to the hospital; that he did not feel his pulse, or examine his tongue on the morning of the 15th, and that he had not heard that he was insane, or pretended to be, prior to that time.

The defence claimed, that Rogers was insane and irresponsible at the time of the homicide; and therefore, should be excused from the the penalty of the crime of murder.

It was shown by the defence, that Rogers' general conduct had been as good as other prisoners, until within a few days of the homicide.

On Monday night, the 12th of June, he was noisy in his cell—repeated expressions of terror, as, 'I shall die! I shall die!!' &c. Tuesday, the 13th, appeared much agitated, and said that he was told by voices overhead, that the popo-game was to be played on him; that checkerberry was put in his food, and that he must hold his head down and sweat it off. On Wednesday, the 14th, he repeatedly spoke of voices informing him that he was to be shut up by the warden—of the popo-game the officers were playing on him; and appeared very anxious about the result. At night was very noisy in his cell, for which he was showered the next morning.

Thursday, the day of the homicide, Rogers seemed agitated and restless; did not keep at work regularly, but would stop, hold his head down, and appeared to be in a study.

An officer of the prison informed the warden that he believed Rogers to be insane; to which he replied that it would not do to admit it, for fear of the effect on the other prisoners.

In the afternoon he became still more excited, and repeatedly requested persons to see the warden and get him released from punishment. Although he was as often assured that no punishment was intended for him, yet it had little influence in quieting his fears, and he would immediately repeat the same request.

Between four and five o'clock in the afternoon, he went to the contractor of the shop, knelt down, and implored him to see the warden, and get him excused from punishment. At

that time, his voice trembled, his hands were clasped, and he appeared in great agony. He was told to return to his work, which he did.

In a few minutes after this, Mr. Lincoln came into the room, when the fatal blows were given.

By the testimony of Abner Rogers, Sr., and other relatives, it appears that the prisoner had fits in his infancy, that continued until he was 6 or 7 years old; that he had been subject to turns of wakefulness at night, when he would get up and walk his room for hours in a high state of alarm. He also had one brother who was imbecile, another one who had fits; and many distant relatives, who had either been insane, or extremely nervous.

On Friday, the day after the homicide, the Rev. Louis Dwight, Secretary of the Prison Discipline Society, called to see the family of the deceased warden, and also saw the prisoner, whose appearance he thought very singular, and indicative of mental disorder. He therefore called on Dr. Bell, and induced him to visit him in the prison. The state of the prisoner's mind is fully detailed by Dr. Bell, who saw him repeatedly, and from whose testimony, as well as that of Drs. Woodward and Ray, who attended the trial, copious extracts are given. The testimony of Mr. Dwight describes the same, or similar symptoms as that of Dr. Bell, and is therefore omitted.

It may be remarked, however, that much credit is due to him, for his sagacity in perceiving Rogers' mental state, and also, for his benevolent efforts in his behalf, before and during the trial.

Dr. Bell testified:—

I am Superintendent and Physician of the McLean Asylum, and have been such seven years and upwards. I went to see the prisoner, Rogers at the solicitation of the Rev. Mr. Dwight, on Saturday morning, the 17th, at an early hour. I had no previous knowledge of the defendant. After some delay at the prison, we were invited by the deputy warden and chaplain to go to his cell. The deputy warden unlocked the door, and we heard a momentary outcry, indicative of fear and affright. It seemed like that of a person just roused from sleep, and I satisfied myself that this was the case.—The conversation at first was between him and Mr. Curtis, the chaplan, about sending for his father. His manner during this, was calm, composed, and natural. Mr. Dwight, I think, then asked him why he killed Mr. Lincoln? Upon this subject, he began at once a strain of incoherent and wild re-

marks, showing plainly, that his was a case of real, or highly simulated, insanity. These he continued until I designedly turned the conversation to other subjects. His detail related to certain voices which he had heard at various times, and from several of his fellow-convicts; and which announced to him, that he was to be the object of the injurious treatment or influences of the warden. The warden had learned from Mr. Curtis, as I gathered it, a knowledge of the popo-game, which Mr. Curtis had himself brought from the Auburn prison, and this was to be practised upon *him*. The warden was also going to make another injurious attempt upon him, by putting checerkberry into his food. I asked him to explain what he meant by the popo-game. He replied, that they drove you round and round your cell; that he had stood it three nights, but that it would be impossible for him to hold out 24 hours longer.

I asked him what he meant by checkerberry? whether it was the common evergreen that grows in the woods? He said it wasn't *that*, but something that set your brain in a whirl in a moment. He said that these voices came to him, principally, from the top of his cell; some of them were in the language of reproach; as, 'damn you, they'll kill you!' others were commisserative; as, 'Rogers you have got to die,'—'you'll never get out of prison until you are carried out feet foremost.'

When the conversation was turned to other subjects, he conversed naturally in relation to them, showing no disposition to recur to these troubles. I counted his pulse twice at this interview, and found it over one hundred at each time. His tongue was slightly coated, his head cool, face shrunken, and no intolerance of light in the somewhat dark place where we were.

When we began on the popo-game and the injuries practised on him his manner was exceedingly rapid, repeating sometimes three or four times with great volubility and rapidity, such phrases as, 'tread up'—'tread up'—'damn you, they'll kill you;' this, spoken with a loud voice, and great intensity. This interview continued one hour and a quarter.

I saw him again the Tuesday following, the 20th. His general manner and appearance were about the same. But there was a very considerable difference in his manner of treating these imaginary communications. His conversation was at first natural and calm. When it turned on the subject of the game, he resumed his old rapidity, but every now and then, in a sentence like this, 'well, now; I suppose there

wasn't anything in all this,' or 'the devil had put these things into my imagination.' His pulse at this interview was about one hundred. On turning the conversation to other points, he talked freely, and with propriety, making no allusion to the subject of the voices, which was not again referred to, at this interview.

Friday of the same week, the 23d, I saw him again, and let him know who I was, and the object of my visits; that I came to ascertain the state of his mind. I told him this to see if he would affect any different symptoms, or exaggerate those he had already shown. His conversation was essentially the same as before: not introducing the subject of these voices himself, and explaining them as having been merely his own immaginations, or put into his head by the devil. I tried to induce him to treat them as realities, by speaking of them as such myself; but could not succeed. I would say to him, 'When you heard Cole say' thus and so. He would reply, 'I don't suppose there was any thing at all in that.' He once said that he still thought his life in danger. His pulse at this time was one hundred. Dr. Bell saw the prisoner twice after this, at which times he spoke of the voices only when questioned.

At the first interview I had with him, he gave an account of trying to sweat the checkerberry out of him by hanging his head over the bed; and of his distress in finding the blood rushing from his heart to his head. The first three interviews were from an hour and a quarter, to an hour and a half, each. The two last less protracted.

On Saturday, he said, if he had killed Mr. Lincoln, as it was said he had, it was because this popo-game had been played upon him.

I have attended the trial and heard all the evidence that has been given in the case. As to my opinion. At the time of commencing these investigations, and until I came into court, I knew nothing of the opinions of others. I had no impression on my mind at the time of going to the prison, but that the act was a wilful murder.

Judging from my observations alone, I have come to the conclusion, that the case is one of real, and not simulated, insanity. That the defendant was laboring under that species of insanity, which is accompanied with a belief of hearing false voices, or hallucination.

The great mass of evidence which I have since heard, supposing it to be true, corroborates my first opinion; and I have heard but few things inconsistent with it. My reasons for

my opinion are: that the form of insanity, with which this individual appeared to be afflicted, is one not generally recognized as insanity in the world at large, and would hardly be attempted by one competent to feign it, so likely would it be to fall short of its object—that of convincing people that a person is insane who only hears false voices.

Yet the form of insanity is one well known and understood, and not unfrequently met with, by those who have the care of the insane. The delineation of it by this man, if it were feigned, was consistent, and not mingled with any symptoms which do not belong to this type of disease.

The communication reached him solely through one of the senses—that of hearing; and he never pretended that any other was affected. I have never known this form of insanity simulated.

The probabilities of a lucid interval in this case, between the time of the occurrence of the facts testified to immediately preceding the homicide, and the homicidal act, are very small. I should consider that if an outbreak had occurred under the circumstances here stated, it would evidence an uncontrollable impulse to violence. It is a well-settled fact, that after a paroxysm of violence, the insane appear comparatively calm and tranquil.

Dr. Bell here stated a case, illlustrative of the last observation, and of the transitory character of the disease in some instances. A young man, who had been under his care, killed his father in a paroxysm of insanity, supposing he was the devil.

The young man for a short time previous to the act, had shown sowe slight symptoms of depression, or mental alienation, but nothing of an alarming character.

One day his father invited him to go out and work at making hay. While so engaged, as the father was stooping to go through a pair of bars, the son struck him over the head with repeated blows of a pitch-fork, and killed him.

No legal proceeding were had against him. But being brought to the hospital immediately after, (within a week,) he then appeared calm, recognized his delusion, and never showed signs of insanity afterwards.

Dr. Bell presented many other interesting illustrations and remarks which are here omitted.

[In answer to a question from the counsel for defendant]—I consider the present, as a case of positive and decided disease.

Samuel B. Woodward testified—

I am superintendent of the State Lunatic Hospital at Worcester, and have been so upwards of eleven years. Have been visiting physician and director of the Lunatic Retreat of Hartford for ten years; and six years was physician of the Connecticut State prison. In the course of my experience, I have had upwards of two thousand cases of insanity, more or less, under my charge, and have attended many others besides.

I have attended during this trial, and heard all, or nearly all the testimony.

Taking the facts testified to, to be true, I am of opinion that the prisoner was insane at the time of the homicide. I think his case would generally be considered one of monomania arising from hallucinations.

My reasons for this opinion are: that, in the first place, the form of the insanity is one very difficult of simulation, and but very little known in the community. Then, as shown in the prisoner's symptoms, was very coincident in all its bearings with the cases which we have; very much so. I have never known or heard of this form of insanity being simulated.

The calmness of the defendant after the act, coincides with common experience. The outbreak of an insane person seems a safety-valve by which to let off his accumulated excitement.

The outbreak or apparent commencement of the disorder, is frequently abrupt, and instantaneous. The other faculties of the mind than those affected, may remain comparatively vigorous. Cases of as short duration as the present, are not infrequent, though they can hardly be called common.

[Interesting cases illustrative of this and other points, were mentioned by Doctor Woodward during the examination.]

My view of this case is, that Rogers, seeing Mr. Lincoln enter with a stranger, and imagining that his time had come for punishment, felt an irresistible impulse to the homicidal act. My experience would lead me to think that all his thoughts were engrossed by this one idea of punishment, and that his other controlling motives, for the time being, ceased to act.

Isaac Ray, testified—

I am superintendent of the Maine State Hospital; have been such for about three years past. In that capacity I have had considerable experience in cases of insanity, and have

otherwise devoted a good deal of attention to the study of the subject, particularly to its medical jurisprudence. I am author of the Medical Jurisprudence of Insanity, bearing my name.

I have attended during this trial, and heard all the testimony which has been given.

Taking that to be true, I believe the defendant was insane at the time of the homicide. I have not heard a single fact testified to in regard to him, during the week of the homicide, which I consider incompatible with his insanity.

In regard to the reasons for my opinion, I can say but little different from what has been already said by Drs. Bell and Woodward. One other fact in addition to what was said by them, struck me forcibly; that there seemed to be no constant effort on his part to convey the impression that he was insane. In regard to the physical symptoms, I should say that these showed that something was the matter with the man. The state of his pulse, his coated tongue, and shrunken features plainly showed that he was diseased in some way.

I think I never saw, heard, or read, of a case of simulation of this kind. It would be extremely difficult to counterfeit it so as not to be detected.

CHARGE OF CHIEF JUSTICE SHAW TO THE JURY.

After some preliminary remarks on the general object of punishment by law, he said:

In order to constitute a crime, a man must have intelligence and capacity enough to have a criminal intent and purpose; and if his reason and mental powers are either so deficient that he has no will, no conscience or controlling powers, or if through the overwhelming violence of mental disease, his intellectual powers is for the time obliterated, he is not a responsible agent, and is not punishable for criminal acts.

If it is proved to the satisfaction of the jury, that the mind of the accused was in a diseased and unsound state, the question will be whether the disease existed to so high a degree, that for the time being, it overwhelmed the reason, conscience and judgment, and whether the prisoner in committing the homicide, acted from an irresistible and uncontrollable impulse; if so, then the act was not the act of a voluntary agent, but the involuntary act of the body, without the concurrence of a mind directing it.

The character of the mental disease relied upon to excuse the accused in this case, is partial insanity, consisting of melancholy, accompanied by delusion. The conduct may be in

many respects regular, the mind acute, and the conduct apparently governed by the rules of propriety, and at the same time there may be insane delusion by which the mind is perverted. The most common of these cases is that of monomania, when the mind broods over *one idea*, and cannot be reasoned out of it. This may operate as an excuse for a criminal act in one or two modes. Either the delusion is such that the person under its influence has a real or firm belief of some fact, not true in itself, but which if it were true, would excuse his act; as where the belief is, that the party killed had an immediate design upon his life, and under that belief the insane man killed him in supposed self defence. A common instance is when he fully believes that the act he is doing is done by the immediate command of God, and he acts under the delusive but sincere belief that what he is doing is by the command of a superior power, which supersedes all human laws, and the laws of nature. Or second, this state of delusion indicates to an experienced person, that the mind is in a diseased state, that the known tendency of that diseased state of the mind, is to break out into sudden paroxysms of violence, venting itself in acts of homicide, or other acts of violence toward friend or foe indiscriminately, so that although there were no previous indications of violence, yet the subsequent act, connecting itself with the previous symptoms and indications, will enable an experienced person to say, that the outbreak was of such a character, that, for the time being, it must have overborne memory and reason; that the act was the result of the disease, and not of a mind capable of choosing; in short, that it was the result of uncontrollable impulse, and not of a person acted upon by motives, and governed by the will.

The questions, then, in the present case, will be these:

1st. Was there such a delusion and hallucination?

2d. Did the accused act under a false but sincere belief that the warden had a design to shut him up, and under that pretext, destroy his life, and did he take these means to prevent it?

3d. Are the facts of such a character, taken in connection with the professional witnesses, as to induce the jury to believe that the accused had been laboring for several days under monomania, attended with delusion; and did this indicate such a diseased state of the mind that the act of killing the warden was to be considered as an outbreak or paroxysm of the disease, which, for the time being, overwhelmed or suspended reason and judgment, so that the accused was not an accountable agent?

If such was the case, the accused was entitled to an acquittal; otherwise, as the evidence proves the fact of killing beyond a doubt, without provocation, by the use of a deadly weapon, and attended with circumstances of violence, cruelty, and barbarity, he must undoubtedly be convicted of wilful murder.

In the course of the charge, and in the analysis of the evidence, the chief justice made some remarks upon the nature of the testimony of medical witnesses, to the following effect:

The opinions of professional men on a question of this description, are competent evidence, and in many cases are entitled to great consideration and respect. The rule of law, on which this proof of the opinion of witnesses, who know nothing of the actual facts of the case, is founded, is not peculiar to medical testimony, but is a general rule, applicable to all cases, when the question is one depending on skill and science, in any peculiar department. In general, it is the opinion of the jury which is to govern, and this is to be found upon the proof of the facts laid before them. But some questions lie beyond the scope of the observation and experience of men in general, but are quite within the observation and experience of those whose peculiar pursuits and profession have brought that class of facts frequently and habitually under their consideration. Shipmasters and seamen have peculiar means of acquiring knowledge and experience in whatever relates to seamenship and nautical skill.

When, therefore, a question arises in a court of justice upon that subject, and certain facts are proved by other witnesses, a shipmaster may be asked his opinion as to the character of such acts. The same is true in regard to any question of science, because persons conversant with such science have peculiar means, from a larger and more exact observation, and long experience in such department of science, of drawing correct inferences from certain facts, either observed by themselves, or testified to by other witnesses. A familiar instance of the application of this principle occurs very often in cases of homicide, when, upon certain facts being testified to by other witnesses, medical persons are asked whether, in their opinion, a particular wound described, would be an adequate cause, or whether such wound was, in their opinion, the actual cause of death, in the particular case. It is upon this ground that the opinions of witnesses who have long been conversant with insanity in its various forms, and who had the care and superintendence of insane persons, are received as competent evidence, even though they have not had opportunity to

examine the particular patient, and observe the symptoms and indications of disease, at the time of its supposed existence.

When such opinions come from persons of great experience, and in whose correctness and sobriety of judgment just confidence can be had, they are of great weight, and deserve the respectful consideration of a jury.

One caution, in regard to this point, it is proper to add. The professional witnesses are not to judge of the credit of other witnesses, or of the truth of the facts testified to by them. It is for the jury to decide whether such facts are satisfactorily proved. The question to be put to the professional witnesses, is this: If the symptoms and indications testified to by other witnesses are proved, and if the jury are satisfied of the truth of them, whether, in their opinion, the party was insane, and what was the nature and character of that insanity; what state of mind did they indicate; and what they could expect would be the conduct of such a person, in any supposed circumstances?

The jury retired to consider the case, but afterwards came in to ask further instructions upon the two questions.

"Must the jury be satisfied, beyond a doubt, of the insanity of the prisoner, to entitle him to an acquittal?

"And what degree of insanity will amount to a justification of the offence?"

On the first point, the chief justice repeated his foregoing remarks upon the same head; and added, that if the preponderance of the evidence were in favor of his insanity—if its bearing and leaning, as a whole, inclined that way—they would be authorised to find him insane.

On the second point, he added nothing material to the statement of the law already made.

The jury brought in a verdict of "*Not guilty by reason of insanity.*"

The court directed the confinement of the prisoner in the State Lunatic Hospital at Worcester, where he died a violent death some months after.

The circumstances attending his death, with other particulars relative to his health, state of mind, &c., while in the hospital, were given by Dr. Woodward in reply to a letter of inquiry, from Rogers' counsel, Messrs. Bigelow and Bemis, of Boston.

From this letter, we extract the following particulars.

When Rogers came to the hospital, he was not quite well, had a frequent pulse, and suffered from restlessness and want of sleep. On the 5th, 6th, and 8th of February, his pulse was

over one hundred per minute; he was pale, and looked anxious. On the 30th of March, and a few days after, he had another turn of sleeplessness. He complained of headache, vertigo, and loss of appetite. He looked ill, and was irritable. This turn passed off, and he appeared as well as before; worked steadily every day, attended evening prayers, and religious service on the Sabbath, and was calm and attentive at both. About the 15th of May, he was again excited, had headache, frequent pulse, furred tongue, and bad taste in his mouth, which he attributed to bad food. He told an associate that the food offered him was a corpse; he could smell it. He ate little, and did not work much the week of his death; said that he saw evil spirits in his room, and smelt corpses under his bed. His suspicion that he was to be poisoned or injured in some way, became quite strong, and was increased by these delusions, which seemed to get firm hold of his mind. He did not sleep from fear, believing that constant vigilance was his only security. During this time, he looked ill, appeared anxious and distressed. He desired to go to prayers the night he made the fatal plunge, and was not particularly uneasy until the services were nearly closed. He asked an officer near him to go out with him; that is, to his room. He told him the service was nearly ended. He then applied to his attendant, who also told him the same. He said to a patient near him, in a whisper, that the room was full of dead bodies. He appeared greatly agitated and apprehensive. Suddenly, he sprang from the window of the room, a distance of twelve or fifteen feet; and from the injury received from the fall, died thirty-six hours after, not being conscious of anything after the leap.

While at work in the shop, some days before his death, he appeared uneasy and suspicious, and looked wild and excited. He stepped into an adjoining shop, looked about anxiously, and returned to his work without speaking. During this week he appeared much as he did the week previous to the homicide. I have no idea that Rogers intended to commit suicide. His only object was to escape from dangers, which then seemed to cluster around him. He probably acted from impulse, and as is usual in such cases, was wholly regardless of the consequences of his movements at the time. After his death, some circumstances came to our knowledge, which led us to suppose that he had thought of attempting to escape; but as far as is known, he made no such attempt.

Dr. Woodward farther states, that there was a marked coincidence in his conduct immediately before the homicide, and

occasionally for many years previous, and after he came to the hospital; especially the week previous to his death.

These facts and his general appearance while at the hospital, confirm the opinion expressed on the trial, that Rogers was *insane* and *irresponsible* when he committed the homicide, and when he made the fatal rush which terminated his life.

In view of the facts presented at the trial of Rogers, together with the opinions of the medical witnesses, we are not surprised at the verdict of the jury.

Taken also in connection with his subsequent history, as given by Dr. Woodward, and the presumption is very strongly confirmed, that the homicide was committed under the influence of an insane impulse.

Neither is it surprising, that a man, of even Dr. Walker's ability, should have misjudged in regard to the state of Rogers' mind, when he came to the hospital, on the morning of the homicide. He had just heard of his disorderly conduct in his cell, and had witnessed, as the prisoner came in, some eccentricity of manner, which induced a suspicion against his candor. He saw him but for a moment, in company with others; and believing he came to deceive him, made no particular examination of his symptoms. He did not see or converse with the prisoner again until after the homicide, and, therefore, had no sufficient opportunity to judge of his mental condition before that occurrence. H. A. B.

N. Y. State Lunatic Asylum. [*Am. Jour. of Insanity.*

Some Hints on the most Efficient Modes of Administering Medicines. By a practitioner of half a century. — Many of the most important discoveries and improvements in medical science are rendered comparatively useless, in consequence of being unskilfully applied to actual practice. In no department of knowledge is this defect more conspicuous than in therapeutics. Man (and I believe the same remark applies to all created beings) is born with a kind of instinctive antipathy to physic, which antipathy he retains from the cradle to the grave. Look at the ingenious spoons that have been invented to force physic down the throats of infants! Observe the mantel-pieces of sick chambers, and count how many phials are either uncorked, or only half emptied! How great a proportion of mankind hate the very name of physic! If the stomach is apt to turn at the thought of medicine, when we are in health, how much less capable is it to bear nauseous

drugs in the various forms of disease, nine-tenths of which affect the stomach sympathetically with squeamishness, nausea, and aversion to food as well as physic? The evil consequences of nauseous forms of medicine being used in sickness, are great beyond all calculation or belief. One result is, that medicine is not taken in sufficient quantity, sufficiently often, or for a proper length of time.

What practitioner will fail to recognise the following picture of almost daily occurrence? A medical man is in anxious attendance on a patient — say a lady after confinement, and threatened with some grave malady, peritonitis, for instance— he prescribes what he conceives to be active and efficient remedies for the night, and gives strict injunctions to the nurse. In the morning, when he calls, he meets the nurse on the stairs. Have you given your mistress the medicines punctually? Most punctually, sir. Well, what has been the effect? "Brought everyting up again sir." What, all? "Every drop, sir—and I thought she would have brought her very heart up with it." After such intelligence, the feelings of the doctor, on entering the chamber, are not particularly enviable. Now all this is more frequently owing to the form than the substance of the medicine exhibited.

In chronic diseases, where the remedial process is necessarily chronic also, we are daily baffled by the repugnance, nay, the resistance of the patient to a protracted course of physic. Yet it might very generally be so contrived, that the patient would desire rather than loathe his medicines.

I am aware that in some acute diseases, the state of nausea itself is desirable and salutary. But it is not the mere nausea or sickness which lessens the velocity of the circulation, opens the secretory vessels, and checks inflammation. These remedial processes depend much upon the *quantity* of medicine. say antimony, which the patient can bear in order to induce them. Thus double or triple the quantity of tartrate of antimony will be borne, before sickness is induced, if given in an effervescing draught, as compared with the same medicine given in plain water. And the remedial effects will be in proportion. This is a truth that should ever be held in mind, and the principle was well understood by Rasori, Thomasini, and others. The contra-stimulant effects of antimony are trifling during the nausea and sickness at the beginning. It is when the *tolerance* is acquired that the inflammation or high fever is controlled.

But there is a large class of diseases in which the stomach is morbidly irritable, and where nauseating medicines are pos-

itively injurious. Putting aside the multitudinous forms of dyspepsia, we have affections of the uterus, the kidney, the liver, the pancreas, &c., where the stomach is prone to disordered function, and where it is of the greatest consequence to exhibit medicines in forms that will tranquillize rather than nauseate the stomach. Diseases and disorders of the kidney are now acknowledged to be much more frequent than they were formerly suspected to be—and these are very generally attended with gastric irritability. In these it is of great importance not to ruffle the stomach by medicines. In affections of the brain, now so exceedingly common in consequence of the advanced stage of civilization, and the operation of various perturbing moral causes, the stomach is often the organ most conspicuously deranged—and we are not seldom foiled in the exhibition and perseverance of proper remedies, from the sympathetic disorder of stomach.

Nine-tenths of the cures that are said to be performed by homœopathy, result from the spare diet and the nullity, as it were, of medicine employed. Of all the medicines that are prescribed by the physician, the class of salines are the most generally beneficial, as opening the secretory organs, as the skin, the liver, the kidneys, &c., besides improving the state of the blood, and restraining febrile action in the constitution. These, when exhibited in an effervescing state, are far more palatable, as well as more efficacious, than when given in a plain form.

Tonics, on which the routine practitioner so much relies, and which he exhibits with no sparing hand, are more frequently injurious than beneficial. They give a feeling of tone for a time; but they lock up the secretions, increase too much the appetite, and lay the foundation for future states of plethora, congestion, or indigestion.

Now saline effervescents may be made the vehicle for many of the most powerful tonics, and indeed the most potent medicines which we possess. The citrate of iron, colchicum, antimony, arsenic, quinine, iodine, &c., &c., may all be exhibited in a form that increases their remedial efficiency, and lessens their tendency to nauseate the stomach.

Bulletin of Medical Science.

On the Use of Iodide of Potassium in Asthma. By W. B. Casey, M.D., of Middletown, Connecticut. Mr. Editor: For a year past I have looked through the various journals that came under my observation, in the expectation of seeing some

notice of the subject of this article; but have, up to this time, met with but a mere incidental mention of the fact that hydriodate of potash has been employed with some benefit in asthma. I therefore send you the result of my experience with it, trusting that the statement which I make will excite the attention of our profession, and lead to a trial of the remedy on a more extensive scale. Some two years since, Professor Mütter, of Philadelphia, mentioned in the course of conversation with me, that he had accidentally discovered the fact to which I am now endeavoring to draw attention.

I immediately after this commenced its use with a number of patients suffering under this distressing and intractable complaint, and to our mutual delight, they were all more or less speedily relieved. I have now made use of the medicine in some twenty-five or thirty cases of asthma, some of them very severe and aggravated; and so far, in no one instance where a fair trial has been made, has it failed to afford unequivocal and decided relief. These facts I have stated at our county medical meetings, and have urged the adoption of the practice upon many of our neighboring physicians; and so far as I can ascertain the result, all who have tried the remedy will endorse my statement of its value. I am happy to add the testimony of Dr. North, an eminent physician resident at Saratoga Springs, who informs me that he has experienced in his own person, great relief from the use of the medicine, and has witnessed the same effect in others. As a general rule, the patient is benefitted after a few days' employment of the article, but some cases will require more time, perhaps weeks before they improve; in one of mine, a very severe case of over twenty years' duration, I persevered for nearly three months before there was any decided amendment.

I feared, at the outset, that the medicine would prove to be merely a palliative, (and even then it would be invaluable,) but further experience warrants my belief that in mild cases of recent date a cure may be effected by its means.

In almost one-fourth of my cases, relapses have occurred after discontinuing the remedy; this occurrence, however, was, in most of them, owing to severe attacks of catarrh, or to errors in diet and consequent derangement of the digestive organs, which, by the way, should never be overlooked in the treatment of asthma; I may mention in this connection, that most of my patients, while using this medicine, had an excellent appetite and gained flesh rapidly.

A long continued use of the iodide of potassium will, in some subjects, occasion an eruption, generally of a pustular

form, (almost always ecthyma;) and I have twice been disposed to attribute to it the occurrence of a slight conjunctivitis; the omission of the medicine for a few days, together with a few doses of rhubarb and soda, will be found sufficient for the removal of these inconveniences. It would scarcely be worth while to offer at the present time any explanation of the modus operandi of this medicine in asthma; nor is it necessary here to describe the symptoms, pathology, &c., of the disease, my sole object being to bring into notice what I have found a successful remedy for a distressing complaint. Extended experience must determine its value and applicability.

From two to five grains of the iodide of potassium, given three times a day, dissolved in water or some syrup, as, for instance, that of sarsaparilla or tolu, will generally be found sufficient for ordinary cases of the disease. Its continuance must be regulated by the circumstances of each case; of course no intelligent practitioner need be reminded of the attention requisite as regards diet, clothing, and exercise. Dr. North stated that he had taken ʒss. at a dose at bedtime, without inconvenience, and with the effect of preventing the paroxysm usually occurring at night.

Some of your readers may perhaps find fault with this paper, on account of its crudeness of style, and want of method and arrangement; but the practical physician, who will make fair trial of the remedy, will hardly be disposed to criticise the style of the article, or consider as wasted the time spent in its perusal.

Note.—It may not be uninteresting or irrelevant to mention that I have given the hydriodate of potash to several horses troubled with "the heaves or hives," (I am doubtful as to its orthography,) and in all, while under the influence of the medicine, the disease was suspended.

New York Journal of Medicine.

Amputation in the Prairies.—The following case of successful amputation on one of our western wilds, has been going the rounds of the journals; we insert it here, as it furnishes another to the many evidences which we already possess of the great resources of nature, which, under the most adverse circumstances, is capable of accomplishing so many unexpected and surprising results:

"A few days before the caravan had reached Walnut Creek, a Mr. Broadus, in attempting to draw his rifle from a wagon,

muzzle foremost, discharged its contents into his arm. The bone being dreadfully shattered, the unfortunate man was advised to submit to an amputation at once; otherwise, it being in the month of August, and excessively warm, mortification would soon ensue. But Broadus obstinately refused to consent to this course, till death began to stare him in the face. By this time, however, the whole arm had become gangrened, some spots having already appeared above the place where the operation should have been performed. The invalid's case was therefore considered perfectly hopeless, and he was given up by all his comrades, who thought of little less than to consign him to the grave. But being unwilling to resign himself to the fate which appeared frowning over him, without a last effort, he obtained the consent of two or three of the party, who undertook to amputate his arm, merely to gratify the wishes of the dying man, for in such a light they viewed him. The only 'case of instruments' consisted of a handsaw, a butcher's knife, and a large iron bolt. The teeth of the saw being considered too coarse, they went to work and soon had a set of fine teeth filed on the back. The knife having been whetted keen, and the bolt laid upon the fire, they commenced the operation; and in less time than it takes to tell it, the arm was opened round to the bone, which was almost in an instant sawed off, and with the whizzing hot iron, the whole stump was so effectually seared as to close the arteries completely. Bandages were now applied, and the company proceeded on their journey as though nothing had occurred. The arm commenced healing rapidly, and in a few weeks the patient was sound and well, and is perhaps still living to bear witness to the superiority of the 'hot-iron' over ligatures in 'taking up arteries.'"—*Gregg's Commerce of the Prairies.*

Mesmerism.—After the unequivocal and almost unprecedented exposure to which the fraud of mesmerism was subjected, under our own immediate guidance and inspection, we did not consider that it would again be necessary to notice such a piece of arrant trickery and scandal in our columns; but a proper feeling of gallantry demands that we should not pass unnoticed the literary production with which that well-known lady, Miss Martineau, has favored the profession and the public, in the number of the *Athenæum*, journal of literature, for November 23. Miss Martineau, it appears, has long been an implicit believer in the powers of "mesmerism," and

yet omitted to resort to that art for aid, although laboring, as she believed, under an incurable disease, during a confinement to her room of four and a half years' duration—a circumstance which seems to us to be entirely inexplicable, and renders the statement of her suffering for so long a period, and her firm belief in the efficacy of the remedial agency of mesmerism, utterly inconsistent and irreconcilable. If Miss Martineau had been considered to be a quack in politics and literature, her present performance might have been regarded as unworthy of attention. It might have been considered, that in producing the essay now before us, she had not manifested any unusual extravagance of thought, pretension, or feeling. But, inasmuch as she has attracted much notice, and the opinions of the world are strikingly divided as to the character of her mental and literary labors, we apprehend that her recent performance in mesmerism will be attended with a different result, and that only one opinion will or can prevail concerning its true nature and objects. To the sober judgment, then, of our medical readers, we commit the following extracts from an essay on mesmerism, by an aged maiden lady:

"One very warm morning in August, when everybody else was oppressed with heat, I was shivering a little under the mesmeric influence of my maid—the influence, in those days, causing the sensation of cold currents running through me, from head to foot. 'This cold will not do for you, ma'am,' said M. 'O!' said I, 'it is fresh, and I do not mind it;' and immediately my mind went off to something else. In a few minutes I was surprised by a feeling of warm water trickling through the channels of the late cold. In reply to my observation, that I was warm now, M. said, 'Yes, ma'am, that is what I am doing.' By inquiry and observation, it became clear to me, that her influence was, generally speaking, composing, just in proportion to her power of willing that it should be so."—*Athenæum*, No. 891, pages 1071–72.

"As the muscular power oozes away under the mesmeric influence, a strange inexplicable feeling ensues of the frame becoming transparent and ductile. My head has often appeared to be drawn out, to change its form, according to the traction of my mesmerist, and an indescribable and exceedingly agreeable sensation of transparency and lightness, through a part or the whole of the frame, has followed. Then begins the moaning, of which so much has been made, as an indication of pain. I have often moaned, and much oftener have been disposed to do so, when the sensations have been most tranquil and agreeable. At such times, my mesmerist

has struggled not to disturb me by a laugh, when I have murmured, with a serious tone, 'Here are my hands, but they have no arms to them;' 'O dear! what shall I do? here is none of me left!' the intellect and moral powers being all the while at their strongest. Between this condition and the mesmeric sleep there is a state, transient and rare, of which I have had experience, but of which I intend to give no account. A somnambule calls it a glimmering of the lights of somnambulism and clairvoyance. To me there appears nothing like glimmering in it. The ideas that I have snatched from it, and now retain, are, of all ideas which ever visited me, the most lucid and impressive. *It may be well that they are incommunicable*—partly from their *nature* and *relations*, and partly from their *unfitness for translation into mere words.* I will only say that the condition is one of no 'nervous excitement,' as far as experience and outward indications can be taken as a test. Such a state of repose, of calm translucent intellectuality, I had never conceived of; and no reaction followed, no excitement but that which is natural to every one who finds himself (query, *herself*) in possession of *a great new idea.*"—*Idem*, page 1072.

[The following letter from Dr. Robert Hull, of Norwich, where Miss M. resides, has more recently appeared.]

"This admired writer has, however, thought right to announce her case publicly as one of successful mesmerism—and the interests of truth and society compel the antagonists of this medical heresy to analyze, so far as possible, the history, and falsify the conclusion, that, because the patient is well, the mesmeric aura has effected her cure. Now, although the laudable delicacy of this extraordinary lady hath suppressed the details of her malady, yet I have a right to assume that the circulated whispers were well founded, and that the malady was abdominal tumor. Here (in Norwich) this celebrated author is too well known that her age can be any secret; and her amiable and simple character would render her careless to conceal. And she will not be surprised, therefore, nor angry, if she is told, that she has been laboring under the climacteric disorder of her sex; that this often produces a physcony of the abdomen, with oppression and universal languor; that in such circumstances the single woman is terrified with ideas of cancer, dropsy, and organic diseases; the married lady fancies she is about to multiply the species, and her fond husband provides a doctor and the nurse. A case of this kind is reported in the person of a Mrs. Trunnion, by Dr. Smollett; and instances of the first-named deception in

spinsters are daily occurring. But nature goes through her proceedings; the abdominal tumefactions subside; and when the climacteric period has passed, women often enjoy better health and longer life than the other sex. In this particular case of our popular townswoman let not the mesmerizer triumph! The success was due to the natural process, aided by the vigor obtained from faith and hope. Hence energy, exercise, air, *omission of opiates*—and it seems to me that this delightful result would have been earlier effected—I mean the natural cure—had not the patient become, from her own confession, a complete opium-eater. She had poisoned herself for years with this exterminating drug. To conclude: my firm persuasion is, that this vaunted case is one of thousands, in which the mind has relieved the body from *functional*, not organic disorders; while ladies of a particular age will do well *not* to applaud Mesmer for the cure of their peculiar symptoms, which time and the physician will generally cure, unless baffled by pernicious treatment; and that young ladies should be especially careful to eschew this revived foolery, which in many instances hath created, instead of relieved, tumors of the abdomen."—*London Lancet.*

On the Use of Arsenic in Destroying the Sensibility of a Carious Tooth, Preparatory to Filling. By Edward Taylor, M.D., Natchez. It is only when there is considerable inflammation and great sensibility in the carious bony structure of the tooth, that arsenic, or any other agent than an excavator, can be advantageously employed, and when, too, from the greater activity of the circulation, most danger is to be apprehended from so virulent a poison. But in the employment of it for this purpose, though it be applied under the restrictions recommended by Dr. Ide, in volume 2, page 247, of the American Journal of Dental Science, I regard it as an unsafe remedy, when the destruction of the pulp is not desired, and have discarded its use altogether, except in such cases.

There must always be more or less absorbed and taken into the general circulation, and the effects produced by it are in proportion to the quantity employed and the vascularity of the tooth. The irritation which it first excites in the part induces a determination of blood to it, and if the vascularity be great, the tooth will frequently become injected with red blood, which I have never known to happen in the treatment of a diseased tooth where arsenic had not been used; and I have

no doubt that this will account for the injection of the tooth in the case mentioned by Dr. Norton in the last number of the fourth volume of the Journal. It may also serve as an answer to his first three inquiries. When the structure of the tooth is more dense and less vascular, several months will sometimes elapse before any inflammation will be evinced, and when once developed I have seldom been able to subdue it so as to preserve the pulp, and have often had the extreme mortification to see teeth, the health and beauty of which I had thought preserved, become a source of pain and annoyance.

The history of a single case may suffice to show its evil effects. About two years since I applied a small portion to the front incisor, (of a lady about 30 years of age,) of yellow, dense structure, for three or four hours. I then removed the diseased bone and filled it with gold, and received her hearty thanks for doing it with so little pain. In a few weeks it became subject to considerable pain upon the introduction into the mouth of anything hot, which, however, was borne with for some time, but finally it became so painful and discolored that she called for advice. The tooth was *very* purple, with severe throbbing. I applied several leeches and directed Seidlitz powder, which soon gave relief, but the next day it was as bad as ever, when the same treatment was observed with the same result. The day following it was as bad as before. I then removed the plug, and drilled to the nerve cavity, when a free discharge of blood ensued, which gave immediate and permanent relief so long as the opening remained. In a week or ten days I cleansed out the nerve cavity to near the end of the fang and filled it with gold, but in a day or two was obliged to remove the filling, when another free discharge of blood ensued, and afforded entire relief. I then introduced a tube, and filled the artificial cavity, which answered well, so long as the tube remained open; but during a short absence, it became obstructed, and an abscess was formed and discharged itself along the neck of the tooth. Thus, to avoid a few minutes' pain, she had suffered for days, and is disfigured by an unsightly tooth, which she must soon lose. A remedy of such specific action, without its injurious effects, would certainly be a desideratum; and if any of our professional brethren are acquainted with such an agent, I, for one, would be thankful to have them communicate it.

American Journal of Dental Science.

Punishment of Quacks in Olden Times.—At a period when quackery is prevailing to such an unprecedented extent amongst us, it may be of advantage to indicate some of the punishments that were formerly inflicted in England on these impudent impostors. We copy the following instances which we find recorded in a recent number of the *Provincial Medical and Surgical Journal:*

"In Edward the Sixth's reign, one Grig, a poulterer, in Surrey, was set in the pillory at Croydon, and again in the Borough of Southwark, during the time of the fair, for cheating people out of their money, by pretending to cure them by charms, by only looking at the patient, or by casting his water.

"In the reign of the first James, the council despatched a warrant to the magistrates of the city of London, to take up all reputed empirics, and bring them before the censors of the college, to examine how properly qualified they were to be trusted either with the limbs or lives of his Majesty's subjects.

"Dr. Lamb, a most noted quack, and who had got a large fortune by his pretended medicines, was at last obliged to confess he knew nothing of physic.

"Read and Woodhouse, two other contemporary quacks, were likewise brought to justice, and acknowledged the same.

"In Stowe's Chronicle we meet with a relation of a water-caster being set on horseback, his face to the horse's tail, which he held in his hand, with a collar of urinals about his neck, led by the hangman through the city, whipped, branded, and then banished.

"Fairfax was fined and imprisoned in King William's time for doing great damage to several persons by his 'Aqua Celestis;' also one Anthony, with his 'Aurum Potabile;' Arthur Dee, for advertising medicines which he gave out would cure people of all diseases; Foster for selling a powder for the green sickness; Aires for selling purging sugar-plums; and Tenant, a urine-caster, who sold his pills at a pound each. Hunt was punished for putting up bills in the streets for the cure of diseases; and Philips, a distiller, for selling strong waters, inserting in the directions what they were good for, and how persons were to take them."

New York Medical Journal.

THE WESTERN JOURNAL.

NEW SERIES.—VOL. IV.—NO. III.

LOUISVILLE, MARCH 1, 1845.

UNOFFICIAL EDITORIAL NOTICE.

The undersigned takes this method of making known to those who may wish to consult him professionally, and also those who may have it in their power to send him facts on the diseases of the Valley of the Mississippi, fitted for the work in which he is engaged, that he will, after the present month, be in Cincinnati, throughout the approaching vacation of the Institute, except in the months of July and August.

DAN. DRAKE, M.D.

STUDY OF BOTANY BY YOUNG PHYSICIANS.

We seize the occasion afforded by the publication, in this number, of an article on the Flora of Illinois, from our respected colleague, Professor Short, to commend the study of Botany to the young physicians of the West. After traveling, within the last three years, nearly 15,000 miles, between and on the Lakes and the Gulf of Mexico, we are able to recollect (out of Louisville) the fol-

lowing physicians only, who cultivate that science. Dr. Carpenter, of New Orleans, one of the Professors of the Medical College of Louisiana, who at the same time attends to other branches of physical science; Dr. Hale, of Alexandria, Louisiana; Dr. Engelmann, of St. Louis, whose communications in relation to some of the objects of this science, have, we understand, been published in Europe, and elicited a complimentary notice from the highest authorities; Dr. Mead, of Illinois; Dr. Chapman, of Quincy, Florida, from whom we have reason, soon, to expect a systematic catalogue of the plants of that El Dorado of American Botanists; Dr. Peter, now Professor of Chemistry in Transylvania University; Dr. Clapp, of New Albany, Indiana; Dr. Bigelow, of Lancaster, Ohio, who has published a local catalogue; Dr. Warder, of Cincinnati, whose city residence, professional duties, and taste for other branches of natural history, are, however, diverting him from the study of plants; Dr. Houghton, of Michigan, its chief geologist, and a professor in its University, who, to medicine, has added the cultivation of botany geology, and mineralogy; lastly, Dr. Riddell, formerly of Ohio, and author of a catalogue of its plants, now, however, a professor of Chemistry in New Orleans, and Refiner of the Mint. Thus, he has abandoned the gardens of *Flora* for the smithies of *Plutus*! When we saw him last spring, instead of being engaged in arranging and describing an herbarium of rare plants, which he had brought from the interior of Texas, two or three years before, his spare time was diligently devoted to the preparation of a book of fac similies of all the spurious coins he could gather together! A collector of flowers transformed into a collector of counterfeit dollars! Well was it for the goddess, that she died off 1800 years ago—happy for her, that she did not live to witness the backsliding of one of her most ardent and gifted sons. To come nearer home with this criticism; we are obliged to state, that Dr. Clapp, after many years of diligent research as a local botanist, has, also, been diverted from the study, but in a different direction from that of Dr. Riddell. Enamoured with the organic remains, and especially the fossil corals, with which the rocks of this neighborhood abound, he has given up his leisure time to *their* study; and with a zeal, rare, indeed, in middle life, and therefore the more admirable, has even studied the German language, for the sole purpose of reading a single distinguished, untranslated work on that branch of Natural His-

tory! It must not be said, that these pursuits have been at the expense of his profession; for, in both its literature and practice, he 'keeps up with the times.' And so might *hundreds* of our brethren, if they had the same industry and love of science. But we must come closer to our main object.

Why is it, that in the Great Valley and its borders, all parts of which abound in native plants, not a dozen physicians, cultivate the science of Botany? Does it indicate, that they have maturely investigated and rejected its claims upon them? We trow not. Most of them have given so little attention to the subject, that they cannot even tell, whether that which at any time strikes their eye, is a 'botanical plant' or not. No, the truth is, they cannot so much as pretend that they have intelligently decided whether they ought to study botany. But, perhaps, their leisure time is given up to other collateral and auxiliary branches of science:—to geology, as disclosing the composition of the surface of the earth, and the waters it spouts up—thus illustrating the probable origin of certain diseases of their neighborhood—to zoology and comparative anatomy—to systematic and diversified meteorological observations—to post-mortem inspections and pathological anatomy! No, such is not the fact. These departments are as little cultivated as botany. In a spirit of rigid justice, the strictest impartiality is observed—and no branch can boastfully say to the rest, *I* am the favorite. Again, however, we must return to the proper subject of our homily.

What, then, are the reasons, that so few of our younger brethren cultivate botany? They appear to be chiefly the three following—1st. The want of studious habits. 2d. The want of scientific taste. 3d. The want of classical learning. Now, we can give a prescription for the whole of these wants, which, if taken, will be infallible—it is, at once to enter on the study of the science, whose claims we are asserting. The collection and examination of plants will promote industry, inspire a love of nature, and prompt to the study of the Latin language. By the end of the first year after graduation, all will be easy. An hour in the twenty-four devoted to the examination and preservation of the plants, collected in visiting a patient, and another dedicated to the Latin grammar and dictionary, would, after deducting eight for sleep, leave fourteen for other reading and attendance on the sick—several more, we apprehend, than are usually occupied. Such are the easy terms, on which all that

we recommend, might be accomplished. Now what are the special motives for pursuing this course? We will enumerate a few.

1st. Every physician ought to have some knowledge of the learned languages; but when he has not studied them at school, he will not do it after graduating, unless he have a particular object in view. The cultivation of Botany would be such an object. Moreover, most of those who do acquire some knowledge of those languages, before they engage in the study of medicine, lose it in a few years; but the study of Botany would not only preserve, but extend it.

2d. The Valley of the Mississippi is not, like Europe, exhausted of its indigenous vegetation, but abounds in native plants, many of which are peculiar to it, and interesting for their beauty or singularity.

3d. Its different latitudes and soils present nearly all the medicinal plants of the United States, not a few of which are deserving of more attention than they have received, and ought to be made subjects of pharmaceutic and clinical experiment by our physicians, as they undoubtedly would be, if botany were studied.

4th. Botany is a science of visible relations—and its study is eminently fitted to improve the faculty of observation.

5. The chemico-vital and vegetative functions of animals and plants, as developed in these latter days, have so many common characters or close analogies, that no physiologist can be either profound or comprehensive in his knowledge, unless it embrace the latter as well as the former, a new motive for adding botany to his other studies.

6th. Without an acquaintance with the elements of Botany, even a common dispensatory is in part a sealed book to the physician; but such ought not to be the case. When he sees at the beginning of an article the words, *Datura Stramonium*—Pentandria Monogynia—Nat. Ord., Solaneae, he recognizes in the first a name, but, if ignorant of the science, is unable to tell his student, or realize to himself, that the other words are full of meaning, both as to the forms and qualities of the plant.

7th. The physician who practises in the country, would find an interest in the flowers which smile along his path, well calculated to relieve the *tedium* of his solitary rides; and this pleasure would

sometimes reward him, for labors which might bring no other compensation.

Students and young physicians are often deterred from entering on the study of botany, by its repulsive nomenclature, and the immense number of its subjects; but there is no science in which they are sooner overcome—no temple in which the difficulties are so much congregated in the vestibule, as that of Flora. A great number of the hard words spring from the same roots, and are but modified multiples of each other. Moreover, most of them are words with which every man belonging to the profession of medicine, ought to be acquainted, independently of their use in botany. Then, again, as to the multitude of plants, they constitute natural groups or families, the different members of which, have so many characters in common, that when one has been studied, all the rest become quite easy. Take, as an example, the genus *Quercus*, or oak. When the flower and fruit of one species are known, it only remains to compare the leaves of trees having the same fructification, to make out the thirty-two species, which Nuttall tells us are indigenous to the United States.

Our limits do not admit of other suggestions. We look forward with much interest to the publication of Professor Short's Flora of the Mississippi Valley. His collections, the labor of a quarter of a century or more, are of vast extent; and we cannot but cherish the hope, than when his book shall appear, it will give an impulse to the study of botany throughout the extended region, from which its materials have been drawn; and upon which we cannot doubt it will confer scientific distinction. D.

CINCINNATI JOURNAL OF HEALTH.

Our excuse for not sooner noticing this modest but meritorious little journal, is, simply, that we did not know of its existence. It is conducted by the "Physicians of the Cincinnati Dispensary and Vaccine Institution," and is published monthly, each number containing sixteen pages, 8vo., double columns. The object of the journal is to diffuse a knowledge of the laws that govern health, and of the causes that produce disease. It explains briefly various points of

Anatomy and Physiology; demonstrates such sources of disease as may be avoided by the community; discusses the subjects of dress, diet, and exercise; shows the effects and tendencies of improper modes of taking medicines; points out the antidotes for poisons, &c. &c.; all of which is couched in language suitable to the popular understanding. In a word, it is intended to make the journal a welcome and appropriate family vistor. It deserves to be extensively patronized, and we trust that it is. C.

KENTUCKY INSTITUTION FOR THE EDUCATION OF THE BLIND.

The '*Third Annual Report*' of this interesting establishment has just been laid on our table. It presents much to interest every benevolent mind. Within the past year, the Board of Visitors have erected a capacious, commodious, and beautiful edifice, in the edge of Louisville, which will be finished in the course of the ensuing Spring.

The number of pupils is 22, varying in age from 9 to 24 years. They are contented and make good progress in spelling, reading, writing, arithmetic, music, and various handicraft arts. They, in general, enjoy good health. Indeed, it has been found that the health of almost every pupil, has improved since coming into the institution—the beneficial result of regular training, in regard to study, exercise, diet, and sleep. Why is it, that so few of the numerous blind persons of the State, are found in this most eligible asylum? We fear, that our brethren do not very faithfully discharge their duty, towards those whom they have been unable to protect or restore from blindness. The people need instruction and exhortation; and who are so well qualified to impart both, as their family physicians? To aid them in this matter, we mention from the Report, that the annual expense of a pupil is one hundred dollars, payably quarterly in advance. This covers board, lodging, washing, tuition, music, books, and stationary; and certainly it is low. No child can be admitted under six nor over fifteen years of age: except by special permission of the Board. Indigent children, of residents of the State of Kentucky, are admitted, supported and taught *gratuitously;* provided it be avouched by a magistrate or

some other respectable person, that neither the parents nor the near relations, are able to meet the expense.

In every instance of application for admission, answers must be made to the following questions: 1. *What is the name of the applicant?* 2. *When and where born?* 3. *What are the names of the parents?* 4. *Are they living?* 5. *What is the name of the post-office nearest to their residence?* 6. *What are the pecuniary circumstances of the parents and relations?* 7. *Is the blindness total?* 8. *If not, what degree of vision remains?* 9. *How was the blindness produced?* 10. *Is the applicant of good natural capacity, and free from bodily defects, and offensive and infectious diseases?* 11. *Are there other instances of blindness in the same family, or among their relations?*

All communications must be directed, post-paid, to Mr. Bryce M. Patten, Director. Louisville, Ky.

Anxious to give our notice a practical character, we have transcribed the terms and conditions of admission, that our brethren, throughout the State, may have and impart the information, necessary to correct action, by those who may desire to place their children in the institution.

We may add, for the benefit of those who live out of Kentucky, that pupils from other States are admitted. There is already one from New Orleans. We hope there will be many more from different parts of the West and South; for the number who are now groping and vegetating in total darkness, is very great.

We are happy to learn, that a bill for the benefit of the institution, has passed the legislature of Kentucky. D.

COOPER ON THE TESTIS.

The two great works of Sir Astley Cooper, "The Structure and Diseases of the Testis," and the "Thymus Gland," have been issued by Lea & Blanchard in a volume of large size and great beauty. As a specimen of typography, it is one of the most creditable that has yet come from the American press. As a work of science, it is esteemed one of the most able of the many able productions of its eminent author. No authority in surgery is higher than that of Sir Astley Cooper, and in this elegant volume it will be found

that he embraced, ten years ago, nearly all that is known in regard to the anatomy and surgery of the testis. It is to be hoped that the enterprising publishers will be encouraged to continue the publication of the works of Sir Astley in this style. Y.

TAYLOR'S MEDICAL JURISPRUDENCE.

From the same publishers we have received a copy of Taylor's Medical Jurisprudence, with notes and additions by Dr. Griffith. The size of this volume renders it convenient, and altogether it appears to us adapted to its purpose—that of forming a guide to the medical jurist. It ought to be studied, and we can venture to say that few books in the same compass contain a greater amount of instructive and interesting matter. We shall have more to say of it hereafter. Y.

BLOOMINGDALE ASYLUM FOR THE INSANE.

To Dr. Pliny Earle, physician to the institution, we are indebted for an able report on the present state of the asylum for the insane, at Bloomingdale, in New York. The report is very full, and embraces a multitude of details of the highest interest. Of 106 patients in the hospital, 50 were cured in the course of the year, and 6 others are reported as being detained until their cure, now far advanced, shall be confirmed. It is plain that this institution is not behind any other in our country in the adoption of those improved modes of managing the insane, which are among the boasts of modern practical medicine. Y.